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ABSTRACT

Literature concerned with management and supervisory training was revieved and analyzed from the perspective of relative effectiveness of various training methods for improving knowledge and awareness, changing attitudes, improving problem-solving skills, improving interpersonal skills, and improving on-the-job performance. Conclusions were drawn relative to each method and the current state of the field of management and leadership training. A 168-item annotated bibliography is presented. (KC)

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Management and Supervisory Training:

A Review and Annotated Bibliography

Joseph A. Olmstead
Devah R. Galloway

HUMAN RESOURCES RESEARCH ORGANIZATION
300 North Washington Street • Alexandria, Virginia 22314

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P.O. Box 18070
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PREFACE

The purpose of the research reported here was to review the literature on management and supervisory training and, to the extent possible, determine the relative effectiveness of a number of training methods for accomplishing several objectives for which such training is commonly used. An additional purpose was to develop and make available to potential users an annotated bibliography of selected publications having high relevance for management and supervisory training.

The work was performed by the Human Resources Research Organization (HumRRO) under Bureau of Mines Contract JO188053. Mr. James Peay of the Bureau of Mines Bruceton Research Center is the Project Officer. Mr. Paul E. Loustaunau is the HumRRO Project Manager. Dr. Joseph A. Olmstead directed the work covered by this report. In addition to Dr. Olmstead and Ms. Galloway, the authors of this report, Mr. B. Leon Elder and Mr. Peter Ramsberger contributed substantially through preparation of initial bibliographies and abstracts of portions of the literature.

Certain of the items appearing in the annotated bibliography were reproduced from *Psychological Abstracts* with permission of The American Psychological Association. Permission is gratefully acknowledged.

All work was performed by personnel of HumRRO's Educational and Training Systems Division located in Alexandria, Virginia. Dr. Robert J. Seidel is Vice President and Director of the Division.

SUMMARY

This report presents the results of a review of literature concerned with management and supervisory training and an annotated bibliography of publications selected for their relevance to such training. The analysis of the literature is concerned with the methodology for training managers and supervisors and with the relative effectiveness of the various methods.

The literature was analyzed and evaluated in terms of the following questions:

(1) Does training increase knowledge, awareness, and sensitivity to the problems and issues involved in management and supervision?

(2) Are participants' attitudes and self-insight influenced by the training?

(3) Does training improve problem-solving skills?

(4) Are participants' skills in leadership and interpersonal relations improved by the training?

(5) Is performance on the job improved through training?

It was concluded that lecture-discussion, conference method, and case analysis may all be effective in improving knowledge and increasing awareness and sensitivity to the human element in work situations. However, there is considerable doubt whether programs which use only methods designed to disseminate knowledge or generate awareness and appreciation of the human element can be seriously expected to exert any lasting influence upon actual job performance.

The evidence suggests that changes in attitudes, as measured by written attitude tests, can be achieved through training. "Mixed" methods, i.e., programs which couple lectures with heavy group discussion, role playing, case analysis, etc., have proven to be the most effective in achieving such changes. However, there is little evidence that on-the-job behavior is modified by training designed solely to change attitudes.

Training can produce improved problem-solving skills. However, the training method used and the care with which the associated program and materials are designed may be the principal determinants of whether such skills can be developed.

Under proper training conditions, it is possible to improve the interpersonal skills of trainees. Unfortunately, most programs devoted to training such skills do not provide the required conditions. Accordingly, most programs are not effective. To be effective, training for improved interpersonal skills requires much longer training time than is normally provided and carefully structured training situations designed specifically to provide intensive practice of skills and systematic feedback to trainees.

Only a few studies have examined the effects of training upon managerial and supervisory performance on the job and results have been mixed. At present, there exists no consistent evidence concerning the impact of training upon job performance.

The shortage of clear-cut findings relative to the effectiveness of methods is due, in part, to the widely diverse approaches to management and supervision that are exemplified by the training programs covered by this review. Four contrasting approaches to management and training are identified in the report. The approaches emphasize

respectively (1) human relationships at work, (2) superior-subordinate relations, (3) the democratic ethic and sharing of power, and (4) coping with individual, group, and organizational phenomena wherever they may arise.

Understanding of these contrasting approaches to management is important because each makes certain assumptions about the kinds of behavior necessary for effective managerial performance. In turn, these assumptions are reflected in the goals and methods selected for use in training. Unfortunately, many trainers formulate their conceptions of management, and of changes that should result from training, in a relatively casual ad hoc way. The resultants are programs which do not reflect the objectives of trainers and are not designed to achieve any clear-cut goals.

Despite the prevalence of such programs, the evidence indicates that management skills can be taught effectively when management sincerely deem training to be important and when it is thoughtfully designed and carefully implemented.

Although difficult when conducted properly, training for managers, supervisors, and leaders is feasible. The key rests in careful analysis of assumptions about the nature of management and supervision, systematic design of programs, careful selection of training methods appropriate for specific program objectives, and the use of trainers who know precisely what they are supposed to do and how to do it. Under these conditions, successful management training can be accomplished.

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Management and Supervisory Training:

A Review and Annotated Bibliography

INTRODUCTION

Training intended to help managers and supervisors to perform their jobs more effectively has been a preoccupation of business, governments, and the armed services for many years. As a result, enormous effort and resources have been expended to develop and administer vast numbers of training programs with titles such as "Supervisory Practices," "Principles of Leadership," "Fundamentals of Human Relations," and "Management Development Seminars." Such programs have become the cornerstones of most management development efforts, and, probably, more resources are spent for this kind of activity than for all other types of training combined.

There are good reasons for this heavy emphasis upon training for managers and supervisors. Without doubt, the effective performance of managerial personnel is one of the most critical determinants of organizational success. What is more, changing economic and social conditions are making managerial and supervisory jobs more complex and more demanding. Accordingly, managers and supervisors need all the help they can get in learning to perform their roles more effectively.

Despite this heavy concentration upon management and supervisory training, it is not unfair to say that many such programs have distinguished themselves more by the number of students graduated than by demonstrated value. Many show no discernible concern for sound training principles, they evidence little in the way of common assumptions and hypotheses relative to learning, and they vary widely in theoretical and methodological approaches. Even more tragically, many programs devoted to training of managers, supervisors, and leaders are astonishingly superficial and, to say the least, their effectiveness is questionable.

A number of reasons probably lie at the root of the situation; however, one stands out above the rest. Very little systematic, concrete guidance is available to trainers concerning the potential uses of the various training methods or the relative effectiveness of the methods in relation to particular objectives. Despite the current proliferation of literature written by and for trainers, most publications do not address the critical issues involved in the development of effective management training and few provide any useful information concerning the rationales underlying the various methods or much solid evidence relative to their potential values and comparative effectiveness. The upshot is that a trainer charged with responsibility for designing programs devoted to manager and supervisor development is forced to resort to tradition, hunch, a few educated guesses, and, perhaps, his own concept of the learning processes involved in such development.

This report is the result of an effort to clarify some of the problems and issues discussed above. It presents an analysis of the literature concerned with management and supervisory training and an annotated bibliography of publications selected for their relevance to such training. Particular emphasis is given to methodology for training managers and supervisors. The report is based upon a survey of more than 500 titles in the behavioral sciences, education, business, and training literature. However, not all surveyed titles are cited in the report, which is interpretive and limited to those publications having the greatest relevance for the issues addressed.

At this point, several caveats are in order. First, in the discussion which follows, the terms "managers" and "management training" will be applicable to both first-line

supervisors and individuals occupying positions at higher levels in the management hierarchy. Although programs for supervisors and those for higher-level managers may differ somewhat in content and focus, the training methods used are frequently quite similar. Accordingly, for the remainder of this report, discussions of training for "managers" apply equally to all levels of management or supervision unless otherwise indicated.

Second, it is certain that the published literature is not completely representative of current managerial training efforts. Many competent individuals engaged in training management personnel do not have the time nor the inclination to publish descriptions of their work. The field is much more active than might be concluded from the literature.

Third, many descriptions of managerial training appear in the popular training and management journals. Most such articles are anecdotal; few are backed by empirical evidence. From the popular journals, it might almost be concluded that there are about as many different methods, or combinations of methods, as there are programs. Each method has its own group of adherents and the popular journals abound with unsupported claims relative to the efficacy of the various approaches. Articles in this group will not be cited here unless they contain concrete data or, in some other manner, contribute substantively to the analysis.

EFFECTIVENESS OF MANAGEMENT TRAINING METHODS

The importance of training methods lies not in the methods but in how well they change people's behavior, and in what direction. Yet, in management training, there is a temptation for trainers to accept one method as correct for all purposes. This identification with one method is likely to obscure the fact that selection of a method ideally is influenced by the character of the changes sought. Any worthwhile training program will ordinarily require different activities, at different times, for different purposes. Choice of a method should be determined by evaluating it against the specific conditions and situations under which it will be used and the objectives it is to achieve.

Following this rationale, it will be productive to consider the following analysis of the literature against a background of several critical issues which, although only infrequently specified, appear basic to an understanding of the methodology of management training.

One issue is concerned with the immediate goals of training. Bennis, Benne and Chin (1961) have posed the question in terms of whether the goal is to train along content or methodological lines. As these authors make clear, in one case training focuses on acquainting trainees with certain stimuli (content) and, in the other case, training is concerned with methods by which stimuli of value can be received. For example, if information is introduced relative to the findings of leadership research, this is content. On the other hand, the trainer who attempts to teach students how to diagnose leadership situations is operating from a methodological orientation. Of course, this issue is intimately related to the trainer's view of the managerial role and of the behavior required to be effective in that role. Although complete separation in practice is virtually impossible, the distinction between method and content is useful for evaluating training methodology.

Another way of looking at training methods is in terms of degree of involvement required of students. It appears that methods can be placed along a continuum of involvement ranging from the lecture, with relative passive participation, to such high-involvement techniques as T-groups, where participants find it exceedingly difficult to remain uncommitted. Although degree of involvement is a problem of mechanics for reaching training objectives, it is closely related to another issue concerned with the learning processes necessary for changing behavior.

The issue of learning processes boils down to a question of cognition versus experience. The problem here is whether cognitive learning alone is sufficient to result in improved managerial behavior or whether experiencing alone will enable a manager to perform more effectively. On the one hand, will knowledge about proper managerial behavior equip a trainee to function adequately? On the other hand, will practice in management situations, simulated or real, alone enable him to be successful? Currently, most opinion leans toward some balance between cognition and experience.

Consideration of the literature against a background of these issues should be useful. They represent some of the fundamental questions that must be resolved if a true technology of management training is to be developed.

The analysis of the literature was conducted within the framework of several questions which are central to an understanding of the approaches taken to management

training. Handyside (1956) and Maier, Hoffman, and Lansky (1960) raised similar questions, and they continue to be as relevant for the present as they were in the past. The questions are:

1. Does the training increase knowledge, awareness, and sensitivity to the problems and issues involved in management and supervision?
2. Are participants' attitudes and self-insight influenced by the training?
3. Does training improve problem-solving skills?
4. Are participants' skills in leadership and interpersonal relations improved by the training?
5. Is performance on the job improved through the training?

INCREASE OF KNOWLEDGE, AWARENESS, AND SENSITIVITY

Not all courses purport to communicate knowledge about managerial problems and behavior. However, in those instances where increased knowledge is an objective, evaluation is relatively simple.

The usual practice is to give trainees achievement tests before and after training. Tests used have included both "true-false" examinations of knowledge about general facts and principles and multiple-choice tests in which the trainee is given problem situations and required to select the best courses of action from numbers of alternatives.

Canter (1951), in a much cited study, reported conducting supervisory training in a large insurance organization. The course used the lecture-discussion method and "technique training." It consisted of 10 sessions of two hours each. Trainees were all supervisors in one department. A comparable group served as control. A variety of tests were administered before and after training. According to Canter, the trained supervisors became more similar in the abilities measured; they became more able to estimate opinions held by department employees; they agreed more closely with experts on the nature of valuable supervisory and company employee relations, principles, and practices; and they appeared to be more able to apply logical reasoning. Those making the highest scores initially gained the most on a majority of the measures. Canter concluded that such a course could be considered valuable for supervisors in these companies.

Di Vesta (1954) evaluated the effects of a 20-hour block of instruction in "human relations," as taught to airmen in a Medical Administrative Supervisor's Course. He also compared a control group receiving only technical instruction against an experimental group receiving "instructor centered" training (lecture) and one receiving "student centered" training (discussion). Using four different tests, he found significant gains in achievement for both groups of experimental students. As measured by knowledge tests, no difference was found between the two experimental groups. Both methods produced equally good results.

Di Vesta found, however, that there was a strong tendency for students starting the course at a "low leadership level" to improve through the discussion method. Students at the upper levels of leadership scores were not much affected by either method. Di Vesta pointed out that only a "tendency" and not a clear-cut change was found.

One of the tests used by Di Vesta, *How Supervise?*, was also used by Canter, and Di Vesta showed comparative scores. He found that, taken as a body, the airmen made gains as great as the insurance company supervisors studied by Canter. Katzell (1948) also used alternative forms of *How Supervise?* to evaluate training of 60 railroad second-level foremen and middle managers. The test was administered before and after the training

which used Katzell's "determinate discussion method." Scores were significantly better after training. *How Supervise?* appears to measure awareness of and sensitivity to supervisory problems. Katzell's "determinate discussion" is basically a directed conference method.

Mosel and Tsacnaris (1954) also reported a study in which *How Supervise?* was used as the evaluative instrument. After a 40-hour supervisory course using several training methods—lecture, discussion, films—extending over six weeks, scores of 83 supervisors showed significantly more gain than did a matched control group. Gain was in terms of group mean scores.

Mayo and DuBois (1963) evaluated a five-week leadership school conducted by the Naval Air Training Command for chief petty officers. The course appears to have consisted mainly of lecture and discussion. One of the measures used by these authors was a test concerned with content of the course and the application of leadership principles. The test was administered at the beginning of the course and again at the end. Significant gains on the test were found for the group as a whole.

An interesting recent development in management training involves the use of self-instructional methods. For example, Showel, Taylor, and Hood (1966) compared the effects of both an "automated" and a conventional lecture-discussion method in leadership training for prospective Army noncommissioned officers against a matched control group which received no training. The automated method consisted of tape recordings of lectures and questions integrated with programmed text material. Learning was measured by a 30-item achievement test. Both trained groups produced after-training test scores that were superior to the control group; however, no difference was found between the trained groups until scores for high-ability and average-ability students were segregated. The automated method was found to be superior to the conventional lecture-discussion for average-ability students. No difference was found for high-ability learners.

Bunker (1965) cited an unpublished study by Boyd and Elliss which evaluated an in-company laboratory training seminar (T-group, lecturettes, role playing) conducted for a Canadian utility. This study compared the effects of laboratory training with the effects of a more conventional program of the same length consisting of case discussions and lectures. It was found that both groups increased in "learning about other people in general." It should be noted that both programs included lectures, which may account for the increased knowledge about people that was credited to them.

Harrison (1966) evaluated a summer Laboratory for Group Development conducted by the National Training Laboratories. He found that exposure to laboratory training (T-groups, lecturettes, role playing) resulted in participants using more concepts dealing with feelings, attitudes, emotions, and perceptions than before training. Harrison interprets this increased use of inferential-expressive concepts to indicate improved awareness and sensitivity to other people.

It is important to note that, in the above studies, students were trained by professional instructors. On the other hand, Mahoney, Jerdee, and Korman (1959) reported an example in which second-level managers were exposed to "the principles of management" by case analysis and group discussions led by "instructors" selected from second-level managers eligible for the course and trained for their assignments as instructors. This training consisted of participation in an earlier offering of the course and special instruction in the training techniques used in it. No significant improvements in knowledge of management principles or in the intensity of case analysis were found. In view of the fact that, in other studies, the case method has been shown to produce improvement in knowledge, the failure of this program can be attributed to the use of inexperienced instructors. It appears that ability and training of instructors may be an important factor, even in the communication of knowledge.

Lawshe, Bolde, and Brune (1959) conducted a series of studies devoted to investigating the effects of single and repeated exposure to the skit-completion method of role playing. Evaluation criteria consisted of scaled responses to a standard human relations training case in two dimensions: Sensitivity and Employee-Orientation. The Sensitivity dimension appears to measure awareness of the human aspects of managerial problems, whereas Employee Orientation measures tendencies to consider subordinates, their feelings, and their welfare in arriving at solutions to such problems.

It was found that changes in criterion case responses were achieved only in those instances where "impact" occurred in connection with the training experience. In addition, in those cases where the impact factor was evident, the effects of this experience were capable of generalizing to performance on a second training case.

Impact is defined as "a characteristic of a training experience which (a) allows the trainee to criticize his own performance in human relations tasks, (b) provide an adequate type of feedback to the trainee regarding his performance, and (c) serves to emphasize a particular human relations factor in a strong emotional manner." Impact was accomplished by (a) role-playing of case materials and (b) the type of discussion held after role-playing.

It was also found that Sensitivity and Employee-Orientation improvements were differentially affected. Improved Sensitivity responses were not necessarily accompanied by better Employee-Orientation responses.

It should be noted, however, that even here skill was limited to giving verbal responses to human relations cases. Once again, no evidence is reported as to whether more skillful behavior in actual situations was a result.

This study has important implications. The concept of impact has a sound basis in principles of learning relative to knowledge of results, feedback, and task involvement. It can be questioned whether very many training programs provide sufficient impact for genuine change to occur.

A further important finding involves the differential effects relative to Sensitivity and Employee-Orientation. On the basis of these findings, it appears that an individual can develop greater awareness of the human element in situations without concurrently developing a more favorable orientation toward the personnel involved. When this finding is coupled with the fact that skill in actual interpersonal behavior is probably a third independent factor in performance, the problem of developing effective training for managers and supervisors becomes very complex indeed.

From the results of these studies, it appears that trainees who attend management and supervisor courses may acquire new knowledge and develop increased awareness and sensitivity to the human element in work situations. It appears also that, under the proper conditions and with experienced instructors, lecture-discussion, conference method, and case analysis may all be effective in improving knowledge and increasing awareness and sensitivity, as measured by paper-and-pencil tests.

However, while it is clear that training enables students to make better scores on tests, it has yet to be shown that individuals who have demonstrated increased knowledge and awareness on tests make wiser judgments when faced with an actual situation than they would have done without the training. In fact, Mayo and DuBois (1963) actually investigated, among other things, the relationship between scores on knowledge tests and supervisors' evaluations of performance back on the job. No significant correlation was found. Thus, there is considerable reason to doubt whether programs which use only methods designed to disseminate knowledge or generate awareness and appreciation of the human element in work can be seriously expected to exert any lasting influence upon actual job performance.

CHANGE OF ATTITUDES AND SELF-INSIGHT

A number of training programs attempt to change the attitudes of participants. Although not always made explicit in descriptions of programs, this approach seems to be based upon the view that attitudes give direction to leadership and interpersonal behavior and that improved performance can occur only after attitudes have been modified.

Most studies have been limited to attempts to measure attitudes immediately after training. Only a few have tried to relate measured change in attitude to performance.

Canter (1951), in the study described previously, also measured changes in attitudes due to training by lecture-discussion. A Social Judgment Test for Supervisors, and a Supervisory Questionnaire were used to obtain pre- and post-training measures of attitudes toward a variety of aspects related to supervision. As with his tests of knowledge, Canter found that trained personnel showed significant improvement in mean attitude scores in comparison with an untrained control group.

Miner (1960) conducted a lecture course specifically designed to foster more favorable attitudes toward the supervisory role. The course consisted of 10 one and one-half hour sessions at weekly intervals. Discussion was mainly limited to questions directed to the instructor. Subjects were 72 supervisors in the Research and Development department of a large corporation. A control group consisted of 30 supervisors in the same department who did not take the course.

Subjects completed pre-course attitude questionnaires and again completed the questionnaires 2-6 weeks after completion of the course. Pre- and post-training comparisons showed a significant rise in attitude scores for the experimental group and a significant decline for the control group. Miner explains the decline in the control group as due to a company reorganization which occurred during the experiment. Miner concluded that "there is considerable evidence that positive attitudes toward the supervisory job were aroused." In a review of human relations training studies, Mosvick (1971) has criticized Miner's research design and, accordingly, has questioned the validity of his results.

In contrast to Canter and Miner who found positive attitude changes attributable to lecture-discussion, Stephenson (1966) found the impact upon attitudes of lecture-discussion to be negligible. Fleishman's Leadership Opinion Questionnaire (LOQ) was used to test for attitudes of management trainees at a U.S. Navy installation. Stephenson found no effect on attitude as measured by the LOQ.

Finally, Lefkowitz (1972) evaluated a three-day supervisory training program for police sergeants and found no change in attitudes as measured by the LOQ, Dogmatism Scale, and an Anti-Negro Scale. The program was predominantly lecture-discussion, with a few films and case studies. Lefkowitz concluded that there were no marked attitude changes as the result of training and he attributed these results to (1) insufficient time devoted to training, i.e., the program was too short; (2) evaluative measures were not isomorphic to program content; and (3) participants didn't know if training content would be used on their jobs. He also concluded that more work needs to be accomplished on methods for evaluating training programs.

Thus, with respect to capability for changing attitudes, findings on lecture-discussion are mixed. Some programs seem to have been successful in changing attitudes; others have not. Reasons for these mixed results are not clear; however, it seems reasonable that some of the causes attributed by Lefkowitz may be operant in the evaluations discussed above, i.e., variations in training time, evaluative measures of differing validity, and other uncontrolled determinants of training effects.

In addition to measuring increased knowledge, Di Vesta (1954), in the study described in the preceding section, also attempted to evaluate attitude changes. He found significant

changes of group mean scores in the desired direction on several attitude measures administered immediately after training. Gains were obtained for both instructor-centered (lecture) and student-centered (discussion) methods of teaching.

The test, *How Supervise?*, contains a section concerned with supervisory attitudes. Barthol and Zeigler (1956) tested a group of supervisors with alternate forms of *How Supervise?* before and after training using the conference method. All groups improved significantly, but the greatest gains were made by supervisors who had attended college. Barthol and Zeigler recommended more work on the meaning of score changes following training.

Most management training programs use several methods. Thus, a program may involve use of lectures, discussion, role playing, case analysis, games or simulations, etc., in varying combinations. For this paper, such training has been classified as "mixed."

Many mixed programs have among their stated objectives some sort of change in attitudes or other personal attributes. Thus, Biggs, Huneryager, and Delaney (1966) trained 32 supervisors of youth opportunity centers in a two-week program composed of practical discussions of major behavioral science principles as well as human relations and sensitivity training. The LOQ and the Firo-B Scale were administered at the onset and at the conclusion of the conference. Firo-B yields a description of the interpersonal needs of respondents. After training, significant changes in group mean scores were found. For the LOQ, changes were described as in the direction of "more considerate" and less "task-oriented." Firo-B mean scores indicated changes toward a weaker need for affiliation and interpersonal closeness.

Spector (1958) developed an "Attitudes Test in Human Relations" and used a preliminary form to evaluate the amount of cadet attitude change as the result of a seminar offered in the senior year of the AFROTC program. The seminar used lectures, role playing, and discussion. Of the 161 items on the test, cadets responses changed significantly on 26. Spector took these results to indicate that there were sufficient changes in the direction of attitudes of a criterion group of Air Force officers to warrant confidence in the seminar's effectiveness in changing human relations attitudes.

In contrast to those studies assessing attitudes immediately after training, Hazeltine and Berra (1953) checked attitudes a year later. These researchers conducted an attitude survey on 200 members of a supervisory group. The results were analyzed into 10 major training areas such as: supervisory techniques, better communications, etc. After the survey was completed, training programs and meetings were held on these various areas. One year later, the survey was repeated and some improvement was noted on 25 out of 64 possible items.

Carron (1964) reported an attempt to change attitudes of supervisors in the research, development, and engineering units of a chemical company. The objective was "to change authoritarian attitudes to group-centered, democratic attitudes." The training program consisted of two-hour meetings spread over a period of six months. The training included case discussions, concepts, role playing, and "laboratory demonstrations." Change was measured by the Leadership Opinion Questionnaire and the Adorno P-Scale. The questionnaires were administered at the beginning of training, at its completion, and on a follow-up 17 months later. Carron found statistically significant changes toward more "democratic" attitudes during training. This change persisted over the 17-month follow-up period.

It should be noted that all of the studies cited so far in this discussion of attitudes have used gains in group mean scores as indicators of change. Harris and Fleishman (1955) raise a question concerning the use of group means as an indicator of course effectiveness. In this study, the Ohio State Leadership Opinion Questionnaire was used to evaluate changes in "Consideration" and "Initiating Structure." In terms of mean

scores before and after training, the effects of such training were minimal when evaluated back in the plant. However, wide individual differences were found to exist among foremen in the leadership attitudes they held after training. Moreover, large individual shifts in scores occurred in both directions. From these findings, Harris and Fleishman concluded that "one cannot assume that insignificant changes in group means among trained foremen are indicative of no training effects. The problem appears to be more complicated than that. It raises the possibility of differential effects according to the individual and the situation in which he finds himself." The same precaution can be applied to the use of group mean scores in any evaluation of training. It will always be useful to know the number of individuals who have changed and the direction and amount they are supposed to have changed.

The studies so far reported in this section indicate that changes in response to written attitude tests or questionnaires can be obtained through exposure of participants to certain types of training. However, in none of the above studies was there examination of the impact of such changed attitudes upon managerial behavior.

Only a few studies have attempted to evaluate the effects of training upon both attitudes and performance, and the results have been mixed. Canter (1951), in the study described earlier, measured morale in departments of his trained supervisors and found an improvement. Unfortunately, morale also improved in departments of his control group. Therefore, the improved morale could not be attributed to the training.

In contrast, Hand and Slocum (1972) trained 42 middle management line and staff managers from a specialty steel plant. Training addressed practical application of human relations principles through a variety of problem-solving methods. The LOQ and the Supervisory Behavior Description questionnaire were administered before training and 18 months after completion. Significant positive changes in LOQ scores were obtained for trainees while changes in the opposite direction were found for a control group. In addition, trainees reported on the Supervisory Behavior Description that their behavior on the job had changed in a positive direction. The fallacy of self-reports as performance indicators is obvious.

Finally, there is the well-known study reported by Fleishman (1953), to evaluate a two-week company program in human relations for foremen given by the International Harvester Company. The course was intended to change the attitudes and behavior of people in supervisory positions—to make them more "human relations conscious." Lectures, role-playing, and discussions were used throughout the course. The Supervisory Behavior Description and the Leadership Opinion Questionnaire were administered before the course, immediately following training, and after return to the job. The questionnaires were designed to measure two dimensions developed by factor analysis: Consideration and Initiating Structure. Generally, reduction in Initiating Structure and increase in Consideration were taken as indication of change in desired direction. The results showed opinion changes in the desired direction immediately after training, but the gains disappeared after a short period back on the job. Furthermore, subordinates of the trainees reported no gains in actual behavior as they saw it.

Fleishman's study has been widely used as an argument for the futility of training leaders without concurrent changes in the organizational atmosphere so as to support the new learning when trainees report back to the job. However, it might be also interpreted to demonstrate that constructive attitudes are not sufficient alone to produce effective supervisory performance.

Recently, one of the more popular approaches to improving self-insight and changing attitudes has been laboratory human relations training (Stock, 1964; Schein and Bennis, 1965). In laboratory training, the central vehicle is the T-group—an unstructured small

group whose members learn through observation and analysis of their and the group's own ongoing experiences and behavior. The T-group may be used alone; but, in laboratory training, it is more often augmented by other methods such as lectures, role playing, case analysis, games, etc. There are many variations in training designs, depending upon the theoretical persuasions of the trainers, characteristics of the trainees, and objectives of the program.

T-groups and laboratory training have been studied, probably more intensively than any other method of management training. Since several excellent reviews of such research have been published (Stock, 1964; Buchanan, 1965; House, 1967; and Campbell and Dunnette, 1968), the extensive literature will not be further reviewed here. Rather, a summary of conclusions and a discussion of implications will be presented.

Campbell and Dunnette (1968) have summarized the most common objectives of laboratory training as follows:

(1) Increased self-insight or self-awareness concerning one's own behavior and its meaning in a social context.

(2) Increased sensitivity to the behavior of others.

(3) Increased awareness and understanding of the types of processes that facilitate or inhibit group functioning and the interactions between different groups.

(4) Heightened diagnostic skill in social, interpersonal, and intergroup situations.

(5) Increased skills of acting in interpersonal situations.

(6) Increased ability to learn from interpersonal experiences.

Although somewhat limited, the evidence seems to weigh in the direction of the conclusion that laboratory training can induce some sort of behavioral change commensurate with the above objectives. The training does seem to result in increased self-insight and sensitivity to the behavior of others, as well as increased awareness and understanding of group and intergroup processes. However, the research contains little evidence that such changes actually affect performance on the job—mainly because performance on the job has been rarely studied in relation to the effects of laboratory training and, where studied, the research designs have been flawed to the extent that clear conclusions could not be drawn.

With respect to the effects of laboratory training experiences upon attitudes, the findings are mixed. In some studies, no changes in attitudes were found. In others, significant changes in attitudes, measured before and after training, were found. In part, the results seems to have been determined by which attitudes were measured and the instruments used.

Laboratory human relations training provides the most intensive experiences of any training method yet devised. Certainly, it possesses the potential for providing the "impact" found by Lawshe, Bolde, and Brune (1959) to be essential if changes within trainees are to be achieved. It appears that, when properly conducted, laboratory training may be effective for accomplishing the objectives listed earlier. However, it has yet to be demonstrated that changes in the behavioral areas represented by the objectives also result in improved performance on the job.

As stated earlier, the studies reported in this section indicate that changes in response to written attitude tests can be obtained through training. "Mixed" methods, i.e., programs coupling lectures with heavy group discussion, role playing, case analysis, etc., have proven to be the most effective in achieving such changes.

On the other hand, there is little evidence that behavior was actually modified by such training and Fleishman specifically found no change in on-the-job performance connected with the changed attitudes of his trainees.

Assuming that attitudes can be actually changed through training, this raises the question of whether "good" attitudes are sufficient alone to result in improved performance. Conceivably, an individual with favorable attitudes could still be inept in his relationships with subordinates. It is possible that the proper attitude is a necessary prerequisite for effective performance, but, in addition, skills in behaving in managerial situations may also be required. Skill does not automatically result from knowledge, awareness, self-insight, or constructive attitudes. For improved performance, it may be necessary to focus in training upon both attitudes and skills.

IMPROVEMENT IN PROBLEM-SOLVING SKILLS

Many programs address problem solving in a conceptual fashion, e.g., teaching the steps to use in solving a problem; however, in only a few programs has it been recognized that problem solving involves skill and that training and evaluation should be designed to develop and measure the ability to solve problems. Where skill development has been the objective, methods have ranged from case study to practical exercises specifically designed to enhance problem solving proficiency.

In the study described earlier, Mahoney, Jerdee, and Korman (1959) found that exposure of second-level managers to "principles of management" through case analysis and group discussion led by other managers did not produce improved solutions to criterion cases. The findings raise some doubts about the potential of case analysis and group discussion for improving problem-solving ability; however, the results cannot be considered conclusive because use of inexperienced instructors (second-level managers trained by the authors) may have been the reason for the outcomes of the training.

Lange, Rittenhouse, and Atkinson (1956) reported the use of abbreviated cases to train U.S. Army officer candidates. Army instructors in the Artillery School at Fort Sill, Oklahoma, used the experimental leadership training course with two Officer Candidate School (OCS) classes and one Officer Basic Course (OBC) class. Candidates were in training to serve as second lieutenants. Two OCS classes and one OBC class were designated control classes and received conventional Army leadership instruction (mainly lecture and class discussion). Instructors were the same for each condition.

For the experimental group, 10 films depicting officer problem situations were presented and an additional eight problems were presented in printed form. Small group discussions followed each film viewing or reading of a case. After these discussions, representatives of each small group conducted a panel discussion of the various solutions proposed by the group.

A battery of tests and questionnaires was administered before and after training to both experimental and control groups. Students in the experimental program showed significant improvement over conventionally trained students in their ability to (1) analyze and present solutions to leadership problems and (2) better select the ideal leader from descriptions of attributes of a variety of leaders with differing leadership styles.

The authors concluded that, in view of the results and student comments, the training method was effective. They also concluded that one of the most important results of the training, according to students' statements, is that they learned to recognize existing or ongoing problems. Students felt that, without the training, they might fail to become aware of problems, thus allowing them to accumulate and develop into

major sources of tension and unrest. The authors recommended that from 10 to 12 hours should be devoted to this type of training, with two to three hours devoted to teaching of leadership principles and the remaining time devoted to leadership problems presented by sound films. It should be noted that no measures of actual performance as leaders were obtained.

Moffie, Calhoon, and O'Brien (1964) reported a 20-hour course in problem-solving and decision-making given to three levels of management at a large southeastern paper mill. The course was conducted by a firm specializing in management development and it heavily emphasized the use of practical work exercises intended to increase the participants' speed and accuracy of problem-solving and decision-making. Participants in the course indicated they thought it was worthwhile, applicable to their work, and would recommend it to other potential participants. However, comparison of before and after measures using the Watson-Glaser Critical Thinking Appraisal revealed no significant gains or losses for either the experimental or control groups. In short, the training had no discernible effects as measured in the study.

In a study of 139 university business administration seniors, Raia (1966) compared the effects of two types of management games. The students were divided into two experimental groups and one control group. One experimental group participated in a "simple" management game, while the second experimental group played a more complex game. Both groups also participated in a series of case analyses, which was the conventional method used in conduct of the course. The control group participated only in the case analyses. For criteria, Raia used a standardized test based on a case problem, the final examination for the course, and a questionnaire concerned with attitudes toward the course. Only the standardized test was given before and after training. No differences between groups were found for the attitude measure; however, both groups using business games improved their scores on the case problem. No differences were found between the experimental groups. Raia concluded that participation in business games may exert an effect upon ability to solve business problems.

Thus, the few studies which have been concerned with problem solving, in its various forms, have produced mixed results. Once again, it appears that the training method used and the care with which the program and associated materials are designed may be the principal determinants of whether problem-solving skills can be improved.

DEVELOPMENT OF INTERPERSONAL SKILLS

Many management and supervisory training programs make no claims to the development of interpersonal skills. These programs appear to rest on the assumption that new knowledge or changed attitudes will automatically result in improved performance. On the other hand, a number of programs make the development of new skills their principal purposes.

Maier (1953) trained 176 industrial supervisors in group decision-making procedures and processes. Participants were exposed to eight hours of lecture on group decision-making methods and four hours of discussion. No practice was provided. Another 144 supervisors received no decision-making training but, instead, received lectures on attitudes. This group served as the control in the study. Following training, the two groups were divided into small groups of four persons each. A criterion test, administered to all groups, consisted of a role-playing problem in which one member served as foreman and the other three played the parts of his subordinates. The task was for the groups to reach a decision concerning a change in work methods. Results of training were evaluated in terms of types of solutions reached by the groups. Maier found that trained supervisors used group-leading techniques that were more effective than did those in the untrained groups.

In his review of human relations training for scientists, technicians, and engineers, Mosvick (1971) described an evaluation of a 14-hour human relations course for engineering supervisors in a large aerospace firm. Trainees received instruction in four theories of motivation by lecture-discussion methods over a seven-week period. Mosvick found no differences in attitude change scores between trained and control groups. However, he found that trainees displayed significantly better abilities in analyzing a simulated communication-conflict situation and they also reported more critical incidents concerning application of motive analysis concepts and techniques on the job. Mosvick concluded that the training was effective in developing diagnostic skills. He suggested also that attitude shifts may not be a necessary condition nor concomitant effect of behavioral changes.

In the study by Di Vesta (1954), described earlier, airmen were trained by the conference method and, then, were required to take charge of small groups and act as discussion leader and chairman, with the objective of solving administrative problems. Using performance in this situation as a criterion, Di Vesta claimed significant improvements in group leadership skills as a result of the training.

As one moves along the continuum of training methodology from the solely cognitive methods (lecture, conference) discussed so far in this section toward more experiential procedures, it would be expected that potential for interpersonal skill development should increase. Such appears to be the case. Thus, Moon and Harriton (1958) augmented lecture discussion with intensive role playing followed by feedback sessions to train engineering supervisors in the skills of conducting performance counseling sessions with subordinates. Thirty hours of instruction were spread over two weeks of half-day sessions. The main evaluation procedure was a questionnaire given to randomly selected subordinates of trainees after completion of the training. The questionnaire addressed 10 areas of supervisor behavior, with emphasis on the person-to-person relationships between the subordinate and his supervisor. Results indicated that the trained group showed a more positive change than a control group of supervisors who did not receive the training. Moon and Harriton concluded that the training had a positive effect upon the interpersonal behavior of the trainees.

Behavior Modeling is a method in which trainees observe a "model" individual perform (role playing, films) in a typical problem situation. The model's behavior is supposed to depict ideal or recommended ways of handling the problem. After observing the "modeled" behavior, trainees practice it with critique and feedback. Programs which use behavior modeling can mainly be classified as "technique training" and the extent to which learning will generalize to contexts other than those portrayed in the modeled situations is questionable.

Programs based upon behavior modeling techniques have been reported by Shaw and Rutledge (1976) for assertiveness training and both Goldstein and Sorcher (1974) and Byham and Robinson (1976) for training in supervisory practices. Although all of these authors report success in skill improvement, detailed data on the studies has not been published. It appears that behavior modeling may be an effective method for training in situation-specific skills, e.g., "handling problem employees," "conducting performance counseling," etc.; however, feasibility of the method for use in developing generalizable interpersonal skills remains unknown.

Despite the extensive research that has been conducted on laboratory human relations training, relatively few studies (Bunker, 1965; Miles, 1965; Valiquet, 1968) have been devoted to direct attacks upon the questions of whether skills are actually improved by exposure to such training and, if so, what skills are improved. The scarcity of such studies appears to be due, in part, to the fact that program designers are reluctant to specify the particular skills likely to be developed through laboratory

training and, in part, to the extreme difficulty of isolating and measuring specific interpersonal skills.

Several surveys (Campbell and Dunnette, 1968; Cooper and Mangham, 1971; Mosvick, 1971) have examined the issue of whether interpersonal skills are improved by laboratory training. The most common conclusions are that the training can result in (1) improved skills in diagnosing individual and group behavior, (2) improved communication and listening skills, and (3) greater skill and flexibility in acting in interpersonal and group situations. What is more, the changed behavior seems to be retained for some time after training, although there have been reports of fade-out after 10-12 months.

Only one study could be identified in which mixed training (more than one method) was used to develop interpersonal skills. This study by Maier, Hoffman, and Lansky (1960) is especially noteworthy because it aptly illustrates the problems involved in developing interpersonal skills. Maier, Hoffman, and Lansky were concerned with improving skill in conducting a rather difficult interview. Three separate groups of undergraduate students served as subjects. The three groups received different treatments and were then observed during their role-playing performance of a difficult interview between the personnel manager and the office manager of an industrial firm. The role-playing performance served as the criterion of effectiveness.

One group received lectures on causation and attitudes prior to the role playing which occurred during the second week of the semester. A second group received the same lectures on attitudes and causation plus additional lectures on motivation, learning, individual differences, and "democratic leadership." In addition, this group participated in weekly role-playing sessions up until the eleventh week when the criterion case was administered. The third group received the same treatment as Group 2 but, in addition, received a lecture and some practice in nondirective interviewing. Furthermore, the criterion problem was not administered until the thirteenth week of exposure to human relations principles and practices.

The authors judge the training to have been only partly successful. The trained students, particularly those in Group 3, displayed more skill in "listening" and accepting negative feelings, but showed no improvement in the more active skills of contributing positively to resolution of the problem.

Maier, Hoffman and Lansky point out some distinctions of this study that have important bearing on training in a practical situation. They note that the type and amount of training received by Groups 2 and 3 were quite different and substantially greater than that received by trainees in the typical course in industry or government. In such courses, the trainees usually attend classes for one or two weeks in which they listen to lectures and discuss various aspects of leadership or supervision. Rarely do the trainees receive any skill training. In contrast, the students in Groups 2 and 3 had attended two one-hour lectures per week and had participated in a two-hour role-playing case and discussion each week for eleven and thirteen weeks respectively. Each subject had two and occasionally three opportunities to lead a group discussion or to interview one of the other members of the class, and all subjects participated in practically every case as either a group member or an interviewee.

The authors draw some conclusions worth quoting:

> "The implication of these results, however, for the amount and type of training received by supervisors and executives in the typical . . . training course in human relations is obvious. Training is a slow process of reorientation and of the acquisition of new concepts, attitudes, and skills. . . .
>
> From these results we can conclude that where management is seriously interested in training supervisory personnel in effective human relations

> practices, they must expect to invest considerably more time than is presently customary. They must give the trainees the opportunity to discard their old ideas about human behavior and to acquire new ones, to discard their old prejudices and to develop more productive attitudes about their functions as supervisors, and to practice the kinds of new skills which they will need in implementing their new understandings."

These conclusions, when coupled with the findings of Lawshe, Bolde, and Brune (1959) regarding "impact," discussed earlier, provide some useful leads as to why many training programs are ineffectual for improving interpersonal skills. It appears that effective improvements in interpersonal skills require some intensive experiences to which trainees will be exposed over a considerable period of time. It is also apparent that many training programs for managers and supervisors do not provide either the intensive experiences or the time required to achieve genuine behavioral change.

From the studies cited in this section, it is evident that, under proper training conditions, interpersonal skills can be developed. Some of the required conditions include:

(1) Provision to trainees of a clear, meaningful conceptual framework for understanding and analyzing the real-world interpersonal situations they are likely to encounter.

(2) Opportunities for trainees to experience themselves functioning in a variety of realistic and relevant interpersonal situations over a considerable period of time.

(3) Opportunities for trainees to observe the consequences of their actions in realistic and relevant interpersonal situations.

(4) Opportunities for trainees to objectively and systematically analyze their own and others' performance in interpersonal situations.

(5) Opportunities for trainees to experiment with and practice new ways of behaving under conditions in which mistakes will not have serious consequences and effective behavior will receive prompt positive reinforcement.

Although many programs stress the importance of effective interpersonal relations, few are designed to provide the conditions necessary for genuine improvement in the skills required for effectiveness. The upshot is that a great deal of time, effort, and money is spent on programs which have low probabilities of significant returns. This is despite the fact that, at present, the knowledge and training methods are available for successful development of the interpersonal skills which are generally considered to be important for managerial and supervisory effectiveness.

IMPROVEMENT IN ON-THE-JOB PERFORMANCE

The ultimate purpose of managerial and supervisory training, whether stated or not, is the improvement of trainees' performance as managers and supervisors. Despite this obvious purpose, it was possible to locate only a few studies in which managerial or supervisory effectiveness was used as a criterion of training validity. The scarcity of such studies can be attributed, for the most part, to the ubiquitous "criterion problem" which has bedeviled industrial psychology since its inception. It is extremely difficult to develop valid measures of job performance, especially for managers and supervisors. Accordingly, most researchers have compromised by accepting criteria other than job

performance. The few studies which have evaluated the effects of training upon managerial and supervisory effectiveness have used a variety of approaches and criteria.

In the study by Moon and Harriton (1958), discussed earlier, supervisors in an engineering department of General Electric were given 30 hours of mixed instruction which appears to have consisted of lecture-discussion and role playing, with feedback and critique of role playing performance. The main evaluation procedure involved a questionnaire administered to subordinates of the supervisors and to a control group of subordinates of supervisors who had not received the training. The questionnaire consisted of questions pertaining to 10 areas of supervision on which respondents were requested to compare present (post-training) conditions with those two years earlier. It was found that the trained group showed a greater positive change in eight of the 10 areas than did the control group. Moon and Harriton concluded that the course had a positive effect upon the performance of the trained supervisors.

In their study, also discussed earlier, Mayo and DuBois (1963) evaluated a five-week leadership course for Navy petty officers in which lecture-discussion was the method of instruction. One of their criterion measures was supervising officers' ratings of the petty officers' performance on the job prior to training and two months after completion. Mayo and DuBois found significant improvement in on-the-job ratings for the trained group and they concluded that the training was effective in improving performance of the trainees.

The effects of T-Group and Laboratory training upon job performance have been quite adequately covered in recent reviews (Campbell and Dunnette, 1968; Campbell, Dunnette, Lawler, and Weick, 1970; Cooper and Mangham, 1971). Many more studies of these types of training have used job performance as criteria than have studies of other types. However, the results have been mixed. There seems to be little doubt that T-Group and Laboratory training produce some sorts of changes in many trainees. However, there has been a problem in connecting the changes to performance on the job. Here, results have been quite mixed and there is almost no evidence that T-Group and Laboratory training result directly in improved managerial performance. Neither is there evidence that such training does not result in improved performance. There simply has not been anywhere near sufficient research to warrant solid conclusions one way or the other.

The fact is that studies of the effects upon managerial performance of any kinds of training are in very short supply. Therefore, although there is reason to suspect that training for managers and supervisors does improve job performance, sound evidence supporting this suspicion remains to be developed.

DISCUSSION

The studies reviewed here provide a little additional knowledge relative to the pedagogy of management training. In summary, the literature indicates the following:

1. Lecture-discussion, conference method, and case analysis may all be effective in improving knowledge and increasing awareness and sensitivity to the human element in work situations. However, there is considerable doubt whether programs which use only methods designed to disseminate knowledge or generate awareness and appreciation of the human element in work can be seriously expected to exert any lasting influence upon actual job performance.

2. The evidence suggests that changes in attitudes, as measured by written attitude tests, can be achieved through training. "Mixed" methods, i.e., programs coupling lectures with heavy group discussion, role playing, case analysis, etc., have proven to be the most effective in achieving such changes. However, there is little evidence that on-the-job behavior is modified by training designed to change attitudes.

3. It appears that training can produce improved problem-solving skills. However, the method used and the care with which the associated program and materials are designed may be the principal determinants of whether such skills can be developed.

4. Under proper training conditions, it is possible to improve the interpersonal skills of trainees. Unfortunately, most programs devoted to training such skills do not provide the required conditions. Accordingly, most programs are not effective. To be effective, such training requires extensive effort on the part of trainees, much longer training time than is normally provided, and carefully structured training situations designed specifically to provide intensive practice of skills and systematic feedback to trainees.

5. Only a few studies have examined the effects of training upon managerial and supervisory performance on the job and results have been mixed. At present, there is no consistent evidence concerning the impact of training upon job performance.

The dearth of clear-cut findings can be blamed on many things—the complexity of human behavior, the difficulty of doing controlled studies in the training field, the lack of adequate measures, or the problems besetting a training designer whose primary responsibility is education of the trainees who are also his research subjects. However, this review of the literature has revealed one factor which seems to be even more important. This factor is the widely diverse approaches to management and supervision that are exemplified by the training programs covered by this survey.

CONTRASTING APPROACHES TO TRAINING

There is little disagreement concerning the desirability of training for managers and supervisors. Most writers concur that training leaders is a critical activity for sound

organizational development. However, underlying this consensus are some highly contrasting approaches both to management and supervision and to training. Within these different approaches, the field of management appears to be conceived as concerned with: (1) the influence of human-social factors on work, (2) superior-subordinate relationships, (3) an ethic of leadership, or (4) all of the phenomena of human interaction within an organizational context.

The "Human Relations" Approach

In business and industry, the rubric "human relations" has been applied traditionally to a movement devoted to sensitizing managers to the necessity for being aware of the human element in organizational life. Based on the pioneering work of Mayo (1946), and his collaborators, Roethlisberger and Dickson (1949), the movement places emphasis upon the social system which evolves when a group of people work together and the effects of that system on performance and attitudes. Under this approach, "human relations" is a matter of working effectively with others and building cooperative effort into the organization. It requires taking the human elements into account and integrating them with technical aspects.

The result of this movement has been a multitude of training efforts ranging from the early Training Within Industry programs of World War II to many of the elaborate in-company programs in existence today. Although varying in content, these programs have one thing in common. Most are "appreciation" courses, designed with the intent of helping managers to appreciate the human element in work by indoctrinating them on the importance of "good human relations." They most often use directed conference methods, although some case study has been used also.

Most programs of this type are intended to make participants more human relations conscious. They are designed on the assumption that, if a manager is more consciously aware of the human element in work, he will be more effective in performing his duties. The process by which this is supposed to occur appears to involve a cognitive reorientation. The free discussion of various facts and points of view is supposed to result in heightened awareness of human affairs which will then be reflected in improved on-the-job performance.

Although making people more appreciative of the importance of human relationships at work cannot help but be a commendable goal, the rationale of this approach raises some problems. For example, it is questionable whether awareness alone is sufficient to effect a change in behavior. When we consider that even extensive experience with physical facts does not necessarily lead to the correct perception of physical phenomena, it is not surprising that being told of the importance of human relations may not result in improved interpersonal behavior. Furthermore, even if the cognitive structure in regard to human relations can be modified by "appreciation" courses, there still remains the need for skill in performing effectively within the new orientation. Normally, such courses make no attempt at skill development.

A final, but most important problem, involves the level at which interpersonal relationships are treated in the typical human relations program. No less a person than Roethlisberger, one of the fathers of the human relations movement, frequently expressed concern over the superficial way many courses deal with human relationships (1951).

The Superior-Subordinate Approach

Human relations problems in organizations are most likely to be felt by people occupying leadership positions. The image of effective operations held by many

managers is characterized by numbers of hard-working subordinates, each performing efficiently at a high level of motivation with eye on the goal and shoulder to the wheel. In reality of course, very few people fit this stereotype. Accordingly, problems of handling subordinates becomes a major preoccupation of many managers.

Because of this fact, management and supervision are viewed frequently as solely a matter of superior-subordinate relationships. Under this view, the goal of training, therefore, is to educate managers in ways of directing subordinates, of motivating them, of controlling their actions, and of modifying their behavior to fit the needs of the organization.

Training programs based upon these requirements are usually devoted to equipping managers with skills for coping with fairly specific problem areas such as those noted above. Because of the highly pragmatic nature of this approach, training has tended to take the form of rules of conduct and specific "techniques" designed for application in prototype situations. As such, it can be contrasted with the goal of developing cognitive awareness as exemplified by the "human relations" approach. However, specific "techniques" for coping with common situations also leaves much to be desired. Human behavior is too complex to be susceptible to solution by formula. Therefore, the manager armed with a set of techniques is apt to find himself ill-equipped to handle the infinitely changing patterns of interpersonal relationships.

The Ethical Approach

In contrast to the above approaches, another movement with a somewhat different orientation has arisen in recent years. It views the field of human relations as being concerned with the democratic ethic and it is characterized by a definite philosophy and a set of more or less specific methods for practicing leadership.

Democracy as applied to human relations and leadership has little to do with democracy as a political system. In this ethical view, the field of human relations is concerned with the processes of working together, with the sharing of power, interests, and accomplishments. Accordingly, leaders should aim toward the development of the individual and his realization of his constructive potential. Development and growth are defined in terms of affording every individual an opportunity for the full exercise of competence and the achievement of mature self-direction.

From this standpoint, a democratic leader is one who stimulates or enables every individual to contribute whatever he can to the total effort of the group (Haiman, 1950). Democratic leading, therefore, involves coordination rather than compulsion. It is concerned with creating the conditions under which subordinates are able to realize their full potential (Gordon, 1955). In business and industry, when used, the emphasis usually takes the form of greater participation in decision making, goal setting, assigning tasks, etc.

Training intended to develop more democratic leaders usually requires more complex methods than either of the previously discussed approaches. Because values and attitudes give direction to interpersonal behavior, training in the democratic ethic is deemed to require a major reconstruction of the personality. Under this orientation, the problem in leadership training is one of "rebuilding the personality by breaking down the barriers to change, introducing new ideas, values, and assumptions into the trainees personality, and thus altering the motivations that guide his activity as a leader (Seashore, 1957)."

This process can be exceedingly complex as well as difficult. Accordingly, a variety of training methods are usually brought to bear, ranging from group discussion, to role playing, to workshops on group-centered leadership, to T-Group and Laboratory training. In each case, the objective is a basic change in attitude with, in some

instances, concomitant training in action skills. Clear-cut evidence of permanent personality change resulting from these or any other training methods has yet to be produced.

Few people would oppose the democratic ethic as a desirable orientation to life. One can seriously question, however, the feasibility of attempting to indoctrinate leaders with the full democratic ethic if they are expected to function in essentially authoritorian organizations such as prevail in industry and government.

Another question can be raised relative to the necessity for reconstruction of the value and attitude system of trainees. Although total commitment to the democratic ethic might require some basic changes in value systems, it seems reasonable that a person could be skillful in interpersonal relations for pragmatic reasons without espousing ethical democracy as a way of life.

The Reality-Based Approach

Recently, there has come to the fore a way of thinking about organizations that has undeniable importance for management training. This approach has received its greatest emphasis from certain organizational psychologists and Organizational Development (OD) practitioners who embrace open systems theory, group dynamics concepts, and theories of social motivation. Under this approach, the fields of management and supervision are conceived to be concerned with all of the phenomena of human organizations. This means that the human side of management is not limited to one or a few highly specific areas such as the superior-subordinate relationship or the influence of social factors on productivity. Furthermore, supervision is not restricted to person-to-person interaction or even leader-group relationships. Rather, an organization is viewed as an interactive system, as a network of social-psychological relationships in which all of the phenomena that arise from human intercourse may be encountered. Thus, managers must be concerned with not only two person, face-to-face relationships but, in addition, within-group interaction, inter-group relations, and the hierarchical systems that go to make up large organizations. Leaders must be concerned with control and manipulation of these various relationships in such a manner as to maximize the effectiveness of their organizations.

Therefore, a manager must be more than merely adept at influencing individual subordinates. In addition, he must have a knowledge of the characteristics of groups and organizations, and, more important, must be able to use them for achieving organizational objectives.

When the field is viewed as dealing with all of the phenomena of interaction, applied management becomes concerned with coping with the realities of human relationships however and wherever they may occur. Thus, a manager is viewed as one of the actively participating parties in a reciprocal interaction situation. Seen in this light, the nature of leadership problems changes continually, and the individual who would be effective must be able to recognize and cope with a wide variety of constantly shifting interpersonal situations as a participant in them. Thus, leadership cannot be put in terms of any one predetermined, correct way to behave. To maintain contact with things as they are, requires adaptability, change, and flexibility of operation.

Under this approach, the basic concept for the guidance of leaders is the "reality principle." According to Thelen (1954), this principle states, "There are facts which need to be taken into account: there is a prior reality—a set of existing conditions independent of the will of a person or group—within which one must operate. When a person tries to act as if these conditions do not exist, or as if they were different than

they are, his action is aggravating to the problem-situation rather than constructive; it jeapardizes immediate goal achievement; and, through thwarting the potential for individual and group growth, it may curtail long range possibilities."

Argyris considers effective leadership to be "reality-centered leadership." According to Argyris (1957), "reality-centered leadership is not a predetermined set of 'best ways to influence people.' The only predisposition that is prescribed is that the leader should first diagnose what is reality and then use the appropriate pattern." Argyris concludes that effective leadership requires effective diagnostic skill.

Following this position, we would expect a leader to be most effective when he can address the concrete needs of the situation confronting him. This would require ability to make realistic evaluation of the specific events that are taking place, and also ability to recognize symptoms of what is happening and to move from symptoms to causes and then to skillful actions intended to alleviate the causes. Therefore, a leader faces a variety of situations which demand a broad repertoire of behaviors if he is to be successful. Leaders must be concerned primarily with assessing events and devising actions appropriate to them.

Training that evolves from such a definite view of leadership would be naturally expected to rest upon a fairly clear-cut rationale. Such is the case. The view that leadership does not involve any special set of specific actions suggests that a person cannot be taught what it takes to be a "good" leader or "how to lead people." Under this approach, what should be done is: (1) teach a student about things to look for (phenomena of interaction), (2) train him how to look for them (diagnostic skills), and (3) help him to react appropriately to them (action skill).

Programs and courses based upon this approach are usually directed toward the development of diagnostic and action skills through the use of high-involvement training methods. Recently, games and complex simulations have proven quite effective when coupled with systematic observation, feedback, and critique. Primary emphasis is placed upon developing the diagnostic attitude, sharpening observational and action skills, and understanding the more dynamic aspects of organizational relationships.

During this discussion, some similarity between the reality-based and the ethical approaches may have been apparent. Admittedly, the similarities at certain points do exist. For example, some proponents of the democratic ethic also stress the importance of diagnostic and action skills, and use high-involvement methods in training. However, despite some similarities, there appear to be several distinct differences that have important implications.

The principal differences are centered around the concept of human relations and the processes involved in learning. The ethical approach views human relations as concerned with the ethics of leadership and the distribution of power. Effective training is to be achieved through changing attitudes, a revamping of the personality, and then developing diagnosis and action skills which will enable implementation of the ethical orientation. On the other hand, the reality-based approach considers the human side of management as dealing with all of the phenomena of interaction on a pragmatic basis. No value orientation is involved. Effective training is achieved through the conscious and systematic development of diagnostic and action skills. Revamping of the personality is not required.

CONSEQUENCES OF CONTRASTING APPROACHES

Approaches to the essentials of management are of more than academic interest; they count heavily in both the design and conduct of training programs. If the several approaches described above are scrutinized closely, it is apparent that they, in fact,

make assumptions, either tacit or explicit, about the kinds of behavior necessary for effective managerial performance. In turn, the assumptions are reflected in the goals and methods selected for use in training managers.

If a trainer believes that management includes consideration of the human-social factors at work and that effective behavior requires taking these factors into account in making decisions and taking actions (human relations approach), he will likely attempt to teach students to be more aware of the human element in work. On the other hand, if the trainer is convinced that the human side of management is a problem of superior-subordinate relationships (superior-subordinate approach), effective manager behavior will be viewed as capably handling subordinates. Therefore, training will involve teaching managers techniques of manipulating subordinates toward better performance.

Commitment to the democratic ethic (ethical approach) leads to the conviction that the fundamental problem involves the equal distribution of power and the growth of individuals. Effective leader behavior, therefore, requires those actions which, through more equal distribution of power, create conditions conducive to individual and group growth. In this orientation, a trainer will aim toward inculcation of the democratic ethic and will teach methods of participative leadership.

However, if a trainer embraces the proposition that managers must deal with all of the phenomena arising from the interaction of people within organized systems (reality-based approach) he is likely to view effective behavior as coping successfully with the realities of organizational life in all of its forms. Training will be devoted to developing the ability to actively understand and control a wide variety of constantly changing situations.

Thus, it is apparent that the kinds of assumptions made about the concerns of managers and supervisors determine in large degree the path a training program will take. However, only rarely in this survey of training literature were encountered programs in which goals were clearly conceived in operational terms, where methods were developed or modified so as to best accomplish specific program objectives, and with evaluation devices built into the training design. Under these conditions, the scarcity of consistent results is not surprising.

Management training is training for leadership. Because of the requirements to achieve fundamental change in the behavior of trainees, serious training for leadership is one of the most difficult educational processes there is. Any conscientious trainer who undertakes such training finds himself faced squarely with some extremely slippery problems. As he sets out to specify the objectives toward which training should be directed, he encounters the question of what objectives can be accomplished with which training methods. Indeed, as he goes about selecting methods, he must resolve the deeper problem of the kinds of changes that must occur within trainees if the objectives are to be achieved. Is the result of training to be a cognitive change based on the acquisition of information, an attitudinal change brought about by the additional information and experience gained through the program, a behavioral change—an improvement in certain specific skills—accomplished through practice, or all of these? His answer should dictate the training methods he selects because each of the above alternatives may require use of a different method. Unfortunately, however, the literature surveyed suggests that, frequently, trainers have formulated their conceptions of management, and of the changes that should occur, in a relatively casual, ad hoc way; or they have uncritically adopted the ideas which prevail in their organizations or cultures.

In too many cases, this uncritical adoption of prevailing ideas has been joined with the unwillingness of managements to spend the effort, time, and money necessary to achieve genuine and lasting change in the behavior of trainees. The result has been that much training for managers and supervisors has been approached from either of two common methodological directions.

The first approach uses traditional teaching methods carried over from the conventional practice of education. For the most part, these traditional methods involve classroom presentation by an instructor of concepts, theory, and recommended ways of handling a job or problems related to it. However, in recent years, it has become apparent that such methods are not very effective for training people for positions of leadership. As stated earlier, genuine improvement in leadership practices requires some fairly fundamental changes in the behavior of the individuals involved. People do not seem to learn leadership skills merely by studying theory or being told how they should behave.

The second approach to training appears to be based on the proposition that improved managerial performance can be achieved by exhortation or a few gimmicks designed to "involve" the students. Although most such programs appear to be harmless, they are also inadequate. Token programs simply are not very effective in generating behavioral change.

Despite the prevalence of such programs, the evidence indicates that management skills can be taught effectively, when training is sincerely deemed to be important by organizational managements and when it is thoughtfully designed and carefully implemented.

Although difficult when conducted properly, training for managers, supervisors, and leaders is feasible. The key rests with careful analysis of assumptions about the nature of management and supervision, systematic design of programs, careful selection of training methods appropriate for specific program objectives, and the use of trainers who know precisely what they are supposed to do and how to do it. Under these conditions, successful management training can be accomplished.

What is needed is systematic guidance for trainers that will permit them to select methods appropriate for specific objectives and use them in accordance with instructions designed to get best results. In this way, trainers can be provided with assistance in building programs that will have greater probability of success than is presently possible.

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Annotated Bibliography

GENERAL

Adair, J. *Training for Leadership.* MacDonald and Company, London, 1968, 158 pp.

An indepth study of how to select and train for effective leadership is based on the belief that though innate character traits play a role of leadership, leadership potential can be developed. The author's theory, known as "functional leadership," stresses that leadership is an interaction among leader, group members, and situation. The good leader is the one who, by virtue of his personality, knowledge and training, is able to provide the functions necessary to enable the group to achieve its task and to hold it together as a working team. The book also discusses the functional approach to leadership, field leadership training, developing leadership in industry, and leadership training for junior managers. The author draws on numerous examples—soldiers, explorers, politicians, businessmen—to illustrate the good leader.

Banaka, W.H. *Human Relations Training: The Cutting Edge of the Motivation to Learn.* American Educational Research Association, Paper, Washington, D.C., 1970, 12 pp.

This report describes a human relations training methodology which shows the basic importance of attuning students to their own private world of stimulation and is the cutting edge of the motivation to learn. The study includes four sections: (1) methodology of personal growth training, (2) an explanation of why such an intensive method of training is needed, (3) examples of terminal student behavior, and (4) a brief list of specific personnel and budget resources needed. The first section emphasizes explicit definitions of feelings and distinguishes from phases of the training process in personal growth. The second section examines middle class maturity norms and concludes that the norm is for the person to have a well-developed head but a highly suppressed body. The third part lists eight examples of behavior of a person if he were fully competent in affective self-awareness and cognitive skills. Finally, the report concludes that practical requirements should be explored before beginning a personal growth pattern.

Bennett, W.E. "The Lecture as a Management Training Technique." *Personnel*, v. 32, 1956, pp. 497-507.

The purpose of any training technique for management development is to imbue the manager with a professional concept of his job and then to help him to upgrade and develop his professional proficiency. The lecture method has been in disfavor for this purpose because of poor experience with lecture content and methods. After the introduction of "outside" speakers and emphasis upon the theoretical aspects of relatively narrow subjects, one company reports general approval for the lecture among management personnel.

Berger, M.L., and Berger, P.J. (eds). *Group Training Techniques: Cases, Application and Research.* John Wiley and Sons, New York, N.Y., 1973, 191 pp.

Presents a series of articles by practitioners describing major group training approaches. Accounts are included of the managerial grid, T group training, in-company management training, team development training, and organization development. Recent research on training effectiveness is examined and guidelines provided for implementing programs.

Bobele, H.K., Maher, C.R., and Ferl, R.A. "Motion Pictures in Management Development." *Training Dir. J.*, v. 18, No. 9, 1964, pp. 34-38.

This survey shows that some firms do use films in management training, but primarily at the lower levels and usually for introducing new subject matter and stimulating discussion relative to human relations problems. One drawback of films, according to the survey, seems to be the entertainment stigma. A variant of the film presentation is the so-called interruption technique, in which a problem is presented or a situation partially portrayed and the participants are asked to respond to the problem or complete the situation.

Briggs, L.J. *A Procedure for the Design of Multimedia Instruction.* Proceedings of the 74th Annual Convention of the American Psychological Association, 1966, pp. 257-258.

Describes an analytical procedure for accomplishing optimal matching of media with objectives when designing a new program of instruction. The underlying rationale for the procedure is that any educational course comprises objectives requiring heterogeneous types of learning, and that each type of learning requires somewhat different sets of learning conditions. To provide this total range of conditions by the most effective presentation of all the needed instructional stimuli calls for multiple media of stimulus presentation. A 1st application of the 7-step procedure is reported, along with recommendations for methodology for empirical evaluation of the procedure.

Buchanan, P.C., and Ferguson, C. "Changing Supervisory Practices Through Training: A Case Study." *Personnel*, v. 30, 1953, pp. 218-220.

A program for supervisory development planned to assist professional personnel who supervise research and development work in a large government laboratory on improving their effectiveness, especially in the application of democratic principles to their leadership is reported. Efforts were made to apply recent social science research findings to the design of the program and to build into the program effective evaluation methods both of the program as a whole and of specific training techniques. Selected transcripts of the group meetings are provided and conclusions relevant to similar training programs presented.

Byars, L.L., and Crane, D.P. "Training by Objectives." *Training and Development J.*, v. 23, No. 6, 1969, pp. 38-48.

This article offers specific ideas and techniques for defining training objectives and for evaluating the effectiveness of training. Two basic areas of training

should be distinguished when writing training objectives: skills, and the development of knowledge, understanding and attitudes. Each of these two areas has three levels of learning: Level 1 (appreciation), Level II (performance), Level III (mastery). These levels are discussed for each area. A sample course syllabus, lesson outline, evaluation plan, and opinion survey are provided.

Byham, W.C. "Changing Supervisory and Management Behavior: I. Problems With Conventional Training." *Training and Development J.*, v. 31, No. 4, 1977, pp. 3-6.

Since desired behavioral changes often do not result from training alone, more emphasis is being placed on job enrichment and behavior modification. Some studies even suggest that the interpersonal skills of executives tend to decrease over the years, indicating that experience is not the best teacher. Still, the right kind of managerial developmental program, consisting of all on-the-job activities, offers the best potential to change behavior. Attention to psychological principles of learning, such as the importance of feedback and insuring appropriate models, is important. Similarly, the opportunity of working with a particularly skilled supervisor can be valuable. .

Byham, W.C. "Changing Supervisory and Management Behavior: II." *Training and Development J.*, v. 31, No. 5, 1977, pp. 10-16.

Outlines numerous "laws of behavior change." Adequate diagnosis of training and development needs is essential, and the immediate supervisor is vital in bringing about change. Managers must be given suggestions on how to develop subordinates, and trained in these methods. Higher management also must be involved. The individual's needs must be considered. Developmental plans must be committed to writing. A follow-up procedure must be instituted. Change is difficult and results only from a massive coordinated effort directed toward a specific target. These laws can be followed and do result in behavioral change. Through a proper combination of training and development, a proven success of interaction management training programs can be repeated.

Campbell, J.P. "Personnel Training and Development." *Annual Review of Psychology*, 1971, v. 22, pp. 565-602.

This is a review of the literature on training and development. Theoretical and conceptual issues that bear on the training and development problem are discussed. Recent developments in training techniques are noted and new thoughts on the evaluation problem are discussed. In the last section the empirical literature is organized around specific topic areas.

Campbell, J.P. and Dunnette, M.D. "Effectiveness of T-Groups Experiences in Managerial Training and Development." *Psychol. Bull.*, v. 70, No. 2, 1968, pp. 73-102.

This paper attempts to: a) identify and summarize the crucial elements of the T-group method, b) call attention to some of the difficulties in researching both the dynamics and the effects of the method and c) summarize in some detail the research evidence bearing on the utility of T-groups for training and development purposes.

Campbell, J., Dunnette, M., Lawler, E. III, and Weick, K. Jr. *Managerial Behavior, Performance, and Effectiveness.* McGraw-Hill, New York, 1970, 613 pp.

This book describes government and industry's current practices and research investigations directed toward identifying, developing, and motivating managers. Chapters concerned with training are "Training and Development: Methods and Techniques," "Applications of Basic Research and Theory," "The Methodology of Training Evaluation," and "Empirical Studies of Training Effects."

Cantor, N. *Dynamics of Learning.* Foster and Stewart, Buffalo, N.Y., 1946, 282 pp.

This study aims to describe the dynamics of the learning process. The points of view postulated are "a rationale departure from traditional methods of instruction, leading to self-criticism, self-discipline, self-motivation and a willingness to be responsible for one's own decisions." The book explains the implications of psychiatry, mental hygiene, and social case-work principles in education, involving personality development through democratic cooperation between students and instructors. Many pages are devoted to direct student reports in the conduct of college classes in which the interpretation of material is shared by all members of the group. Preceding a general index is an appendix listing the names of students with their comments, presented to trace the development of these individuals through the teaching-learning technique described by the author.

Carnarius, S. "So You're Going to Handle Supervisory Training . . . ." *Training and Development J.*, v. 29, No. 2, 1975, pp. 3-8.

Offers suggestions to aid in identifying training needs, designing suitable training, conducting the resulting programs, and evaluating results. Since the usual manager cannot define the behavioral changes needed, a training chief may start by studying the situation in terms of eight basic supervisory skills. After setting objectives, learning situations are designed according to the principles of adult learning. Staying aware of the learning process and working with it intelligently will facilitate conduct of the training sessions. Measurement of specific results is preferable to participant ratings of satisfaction; break-in time for new hires, records accuracy, accident rates and operating costs constitute the best gauge of results.

Carroll, S.J., and Nash, A.N. "Some Personal and Situational Correlates of Reactions to Management Development Training." *Acad. Mgt. J.*, v. 13, 1970, pp. 187-196.

Carroll and Nash (1970) reported that 45 foremen in a management development program felt the training was more applicable to the job when they were more highly motivated toward promotion, satisfied with the organization, and had sufficient freedom to perform their functions.

Coleman, D.G., and Heun, R.E. "Consumer Protection, Leadership Models, and Training and Development." Paper, August 1977, 10 pp.

This paper examines several models of leadership style that are widely used in staff development workshops and seminars for managers. The discussion focuses mainly on the implications and possible dangers for training subjects of these models, which

include two-factor models, such as those of Barnard and Halpin, and orthogonal grid models, such as those investigated by Blake and Mouton, Brown, and Sergiovanni. These models are frequently used to locate trainees on a matrix that purports to indicate their particular leadership style. The authors argue that while such models are excellent devices for teaching a theoretical concept, they have an emotional impact on trainees that must be considered. Because of this impact, the validity of the measurement instruments should be thoroughly documented before they are used to locate personnel on any leadership matrix.

Craig, Robert L. (ed), *Training and Development Handbook*, New York: McGraw-Hill, 1976.

This handbook is a comprehensive collection of knowledge from leading practitioners in the field of personnel training and development. It contains 47 chapters on all aspects of employee development compiled by 59 leading authorities.

Delamontagne, R. "Design of a Supervisory Training Program." *Training and Development J.*, v. 31, No. 9, 1977, pp. 40-42.

Outlines the steps a training practitioner should follow to produce an effective supervisory training program. An organizational, operations, and person analysis precedes the formulation of instructional objectives, and those objectives should be operationally defined. With objectives carefully specified using the appropriate verbs to represent the appropriate learned capability, a task analysis may be performed. Then, with total knowledge of the learning tasks, a pre- and posttest may be created using terminal objectives as guidelines. With criterion test performance agreed on by those best qualified to judge, the tests are established. After determining present knowledge levels by using the pretest, instructional methods can be selected keeping in mind the importance of transfer of learning to actual job performance. After the group goes through the training program, it is time for evaluation by examining gain scores from pre- to posttest. The final responsibility is to review the system and improve it.

Denisi, A.S. "The Implications of Job Clustering for Training Programmers." *J. Occup. Psychol.*, v. 49, No. 2, 1976, pp. 105-113.

Most training programs seem to have a short time perspective. They are geared to train a person for his first job but then essentially leave him on his own. It is argued that, by clustering jobs and identifying requirements common to a number of jobs, and then by structuring the training program to enable the person to transfer knowledge in these common areas from job to job, it would be possible to prepare a person for his whole work career by training him for a number of jobs at once. Strategies and approaches are discussed and evaluated, and suggestions are made. (59 ref.)

Dyer, W.G. and Cherry, D. "How to Prepare Line Managers to Do Management Training." *Training and Development*, v. 32, No. 2, 1978, pp. 11-18.

This article describes and analyzes a method of preparing line managers to conduct training programs for other managers. Topics explored were: how do you get managers willing to participate in training? What are major obstacles in using managers as trainers?

Fiedler, F.E. "The Effects of Leadership Training and Experience: A Contingency Model Interpretation." *Admin. Sci. Quart.*, v. 17, No. 4, 1972, pp. 453-470.

Summarizes recent studies based on the contingency model of leadership effectiveness suggesting why research typically has failed to show that leadership training and experience increase organizational performance. The contingency model postulates that group performance depends on the match between situational favorableness, i.e., the leader's control and influence, and leadership motivation (as measured by the Least Preferred Coworker scale). Since leadership training and experience are designed to increase the leader's control and influence, they should improve the leader's situational favorableness. A change in situational favorableness through training and experience should, therefore, decrease the performance of some leaders while increasing that of others. Empirical evidence is reviewed which supports this hypothesis. Based on the contingency model, new strategies of leadership training and job rotation are suggested. (24 ref.)

Filley, A.C. and Jesse, F.C. "Training Leadership Style: A Survey of Research." *Personnel Adm.*, v. 28, No. 2, 1965, pp. 14-21.

The personnel trainer may be leader-centered or group-centered depending upon the goals in the teaching situation, group characteristics, training time, and training content. (56 refs.)

Frohman, A.L. and Kotter, J.P. "The Joining-Up Process: Issues in Effective Human Resource Development." *Training and Development J.*, v. 29, No. 8, 1975, pp. 3-7.

Describes four typical problems in the initial management of new 1st level managers and professionals, and summarizes methods for solution. Mismatched expectations are prevented by early discussions using a structured format. Stifling of creativity is handled by identifying job constraints and coaching employees accordingly. Lack of managerial sensitivity is countered by offering a short course on how to manage the new employee. Inappropriate screening criteria are avoided by using a detailed checklist to specify abilities and behaviors required by the open job. The Hiring Guide (a comprehensive list of abilities and behaviors the job may require) is discussed. Action steps of this kind have proved effective in supporting job satisfaction and in promoting productivity on the job.

Goldstein, A.P. and Sorcher, M. *Changing Supervisor Behavior*. Pergamon Press, New York, N.Y., 1974, 90 pp.

Discusses problems in supervisor training and describes an approach to learning interpersonal skills relevant to effective supervision. The approach incorporates a sequence of 4 types of behavioral learning activities; modeling, role-playing, social reinforcement, and transfer of training. (6 pp. ref.)

Goodacre, D. III. "The Experimental Evaluation of Management Training: Principles and Practice." *Personnel*, v. 33, 1957, pp. 534-538.

The problem of evaluation of management training is discussed in terms of subjective evaluations and experimental evaluation. The experimental evaluation employed at B.F. Goodrich and the results of the evaluation are discussed.

Goodacre, D.M., III. "Experimental Evaluation of Training." *J. Personnel Adm. Indus. Relations*, v. 2, 1955, pp. 143-149.

Training in industry has become increasingly popular since World War II. However, scientific and formal evaluation is generally lacking. The author describes an actual evaluation design for a training program, and covers "criterion, controls, statistical analyses and built-in experimental design."

Gordon, T. *Group-Centered Leadership*. Houghton Mifflin Co., Boston, 1955, 366 pp.

The first five chapters deal with contemporary interest in the problem of leadership, the nature of man, trait and situational conceptions of leadership, factors opposing effective group action and the nature of group centered leadership in relation to the group dynamics movement and recent ideas in psychotherapy. The remainder of the volume consists of two case studies: a detailed study of a leadership workshop for religious workers and an autobiographical account, with an objective follow up, of a line superintendent in an industrial organization as he tried out group-centered leadership. 95-item bibliography.

Haiman, F.S. *Group Leadership and Democratic Action*, Houghton Mifflin, Boston, 1951, 309 pp.

A brief introduction to the philosophy and theory behind group behavior and leadership is presented in the first section of this book. The major part of the book concerns techniques for leading a discussion drawn heavily from the application of group dynamics research. The final part discusses the problem of leadership training. Case studies and transcriptions of discussions are presented in the appendix together with a leader rating scale. Bibliography.

Haire, M. "Some Problems of Industrial Training." *J. Soc. Issues*, v. 4, No. 3, 1948, pp. 41-47.

Training of employees in human relations by a system of courses results usually in failure to transfer course precepts to the working situation. If learning be viewed not as pure habit formation but as culture change within a plant, it becomes clear that management must be directly involved, since management is the chief agent of change in the plant culture. Only by inducing management to assure an active role in change can training be effective.

Halverson, D.E. *Managerial Styles*, San Mateo County Board of Education, Redwood City, California, April 1975, 88 pp.

This is one of a series of monographs on the application of management principles to educational organizations. This monograph is devoted to identifying that way

of managing that opens up a system and frees the individuals therein to voluntarily, willingly, even enthusiastically, strive to achieve the goals of the organization. Emphasis is placed on Rensis Likert's profile of organization and performance characteristics, Douglas MacGregor's Theory X and Theory Y, and Robert Blake's and Jane Mouton's managerial grid. Exercises that allow the reader to apply the ideas presented are included.

Handyside, J.D. "The Effectiveness of Supervisory Training—A Survey of Recent Experimental Studies." *Personnel Mgt.*, v. 38, 1956, pp. 96-107.

In a detailed summary of British and American supervisory training research, the author indicates evidence that supervisors verbalize human relations knowledge and attitudes better after training but do not necessarily act "better" so as to be perceived differently by their subordinates. Productivity may improve in their units, however. Attitude of top management often is crucial. Also cites specific findings of these studies.

Harwood, R.F. *In-Service Training Programs for Supervisory Personnel.* University School of Business Administration, Mississippi University, 1978, 77 pp.

A study was conducted to determine what is being done to develop leadership capabilities of first-line supervisors. Data was collected through interviews, examinations of company training literature, and primary resource materials at 125 manufacturing plants in fifty states which, in the aggregate, employ more than 155,000 production workers and have about 10,660 first-line operating supervisory personnel. The principal conclusions are the following: (1) The major broad and specific objectives for teaching leadership/management attitudes, skills, and techniques are being achieved in the programs examined; (2) some specific supportive leadership capabilities and functions (communicative skills, planning, organizing, and controlling) are being taught less successfully than overall objective priorities seem to warrant; (3) attitudes are receptive to the development of ongoing, escalating courses which are natural extensions of existing programs; (4) because planning, organizing, and controlling functions have much higher curricular objective priorities than apparent achievement strengths, some study of delivery systems for teaching these basic functions represents an educational and training opportunity; and (5) research associates who conducted field interviews have gained experiences to enrich their classes. (The appendix includes the interviewee questionnaire and lists of the research associates, plants, consultants, and resource materials.)

Haverland, E.M. *Officer Training Research and Its Implications for Executive Training.* Human Resources Research Organization, Professional Paper 19-69, 1969, 9 pp.

Suggests a pragmatic approach to the problem of training military supervisors of technical personnel for executive training. The job is defined and structured by detailed task descriptions and training involves the statement of precise and specific objectives.

House, R.F. "Leadership Training: Some Dysfunctional Consequences." *Adm. Sci. Quart.*, v. 12, 1968, pp. 556-571.

Previous research about the results of leadership training has revealed both desired and dysfunctional consequences. The effects of leadership training are shown to depend on social influences which both support and hinder the transfer of training into managerial performance. Three specific sources of social influences are described and three dimensions of social influence are advanced. Earlier studies are reviewed to illustrate how the social influence variables account for the dysfunctions of leadership training. Interactions between various types of leadership training and the social influences are hypothesized. Finally, a proposition is advanced to explain and permit prediction of the consequences of leadership training in varying situations.

House, R.J. "T-Group Education and Leadership Effectiveness: A Review of the Empiric Literature and a Critical Evaluation." *Personnel Psychol.*, v. 29, No. 1, 1967, pp. 1-32.

Studies of the effects of T-group experiences, have dealt with characteristics of the participants and changes of behavior on the job. The evidence of effectiveness is contradictory in that both positive and negative effects are reported. It is concluded that T-group training is a powerful tool for inducing change but that the change may be either harmful or detrimental to both the organization and the individual depending on how well the organization can tolerate the changes and how well the individual can tolerate the anxiety. The organization sponsoring the training should be aware of the ethical issues involved. Decisions to use T-group training should involve a determination of the kinds of changes desired, careful screening of participants, and provision for voluntary participation. (3 p. bibliography)

Jacobs, T.O. *The Evaluation of Leadership Skills.* Human Resources Research Organization, Professional Paper 11-73, December 1973, 11 pp.

This paper discusses some of the problems involved in the evaluation of leadership skills. Difficulties in both soft skills system engineering and the evaluation of soft skills such as leadership are discussed. Author says that systems engineering of leadership training is only beginning to emerge from the Dark Ages. Other topics discussed are: who is the true expert; what is the nature of the real world (conjunctive and disjunctive concepts); how to measure the unmeasurable (ultimate critoria are rarely available for measuring the impact of leadership training and development); intermediate criteria used for assessment purposes; and assessment centers. Research needs are cited.

Jennings, E.E. "Attitude Training vs. Technique Training." *Personnel J.*, v. 31, 1953, pp. 402-404.

Foremen training which stresses techniques without the proper attitudes for understanding the workers, frequently fails to improve their performance. Attitude training should, therefore, be stressed in training foremen to apply the techniques of handling workers.

Jennings, E.E. "Today's Group Training Problems." *Personnel J.*, v. 35, 1956, pp. 94-97.

Perhaps training in large groups which aims at encouraging and directing participation, and enhancing group agreement and decisions only increases the need for more leadership and better human relations. Group training has tended to suppress critical thinking of the individual forcing him to accept the thinking of the group, so that the "other directed" persons are becoming the leaders. By expressing themselves freely in groups the trainees learn to verbalize but not to solve their problems. Training directors have emphasized large groups, although the results of the training may be questionable, instead of superior training of small groups.

Kepner, C.H. and Tregoe, B.B. "Developing Decision Makers." *Har. Bus. Rev.*, v. 38, No. 5, 1960, pp. 115-124.

Shortcomings in the lecture, general discussion, audiovisual, case study, workshop, role playing, coaching, and job rotation approaches are reviewed. An approach which combines some of the features of the older methods while meeting the requirements of learning theory is illustrated.

Kirkpatrick, D.L. "How to Plan and Implement a Supervisory Training Program, Parts 1-5." *Training and Development*, v. 32, No. 4, 5, 6, 8, 9, 1978.

This series of 5 articles describes how to plan and implement a supervisory training program. Each article covers one of the following topics: establishing philosophy and setting the climate; determining needs and setting objectives; developing an in-house program; using outside resources; and evaluating program effectiveness.

Klein, A.F. *Role Playing in Leadership Training and Group Problem Solving*, Association Press, New York, 1956, 176 pp.

Written for the layman, this book's major objective is to outline the ways in which role playing should and may be used in solving problems which arise in community organizations. Its eight chapters cover: Using role playing in your meeting, helping the group to role-play, preparing for role playing, the setting and action of the role play, involving the audience, the leader of role playing, how role playing may be used and the values and dangers of role playing.

Kolb, D. "On Management and the Learning Process." in Kolb, D.A., McIntyre, J.M. (eds.), *Organizational Psychology: A Book of Readings*, Prentice-Hall, Englewood Cliffs, N.J., 1974, 437 pp.

Considers that the success of a manager and administrator depends not so much on his knowledge or skills but on his ability to master the changing demands of his job, i.e., his ability to learn. The experiential model of how people learn is discussed, as well as individual learning styles and their relationship to management education and managerial problem-solving. (21 refs.)

Maier, N.R.F. *Problem-Solving Discussions and Conferences: Leadership Methods and Skills.* McGraw-Hill Book Co., Inc., New York, 1963, 261 pp.

The author feels "the objective of skilled leadership is to dissipate the forces in a group that make for frustration and to utilize the group resources that make for cooperative problem solving." This volume integrates the author's recent research on improving the effectiveness of a leader's performance in group problem solving and decision making with his earlier studies on problem solving and frustration. Chapters are: Improving Decisions in an Organization; Conference Leadership; Locating the Problem; Presenting the Problem for Group Discussion; Conducting the Discussion; Reaching the Decision; Discussion Methods for Specific Objectives; Screening Solutions to Upgrade Quality; and Summary of Problem-Solving Principles.

McGehee, W., and Thayer, P.W. *Training in Business and Industry.* John Wiley & Sons, New York, 285 pp.

This book presents problems in industrial training and suggests approaches for solving them. Authors say there is a minimum of "how to do it" information included. Materials are drawn primarily from studies of industrial and military training problems. Chapters are: Training in Business and Industry Today; Organizational Analysis; Operations Analysis; Man Analysis; Learning and Industrial Training, I and II; Methods and Techniques in Industrial Training; The Trainer; Evaluation of Training.

Olmstead, J.A. *Managing the Context of Work.* Human Resources Research Organization, Professional Paper 1-75, 1975, 11 pp.

This paper is an adaptation of material from several chapters in *Working Papers No. 2, Organizational Structure and Climate: Implications for Agencies, National Study of Social Welfare and Rehabilitation Workers, Work, and Organizational Contexts.* The importance of the environment or work context of an organization is stressed as crucial to the effectiveness of both the individual and the organization. A balance between organizational structure and climate is considered necessary. Human resources are an organization's chief resources. Effective utilization of these resources is dependent on three factors: effective management, effective leadership, and effective training.

Olmstead, J.A. "The Military Mind Probes Tomorrow's Corporate Leaders." *Bus. Mgt.*, February 1971, pp. 42-43, 46.

This article discusses the leadership requirements of tomorrow's companies. Leadership is a relationship; it is a "tool for achieving objectives and its success must be judged in terms of what the organization accomplishes." Leader influence, the organization as a system, the role of the leader, and training implications for the future are discussed.

Olmstead, J.A. *Small-Group Instruction: Theory and Practice.* Human Resources Research Organization, 1974, 129 pp.

This volume is an analysis of the state of the art of small-group methods of instruction. It describes some of the more commonly used small-group techniques and the rationale behind them, and provides an analysis of their potential use for various types and conditions of instructional environments. Explicit guidelines are provided to assist trainers and training managers in selecting methods that will accomplish desired instructional objectives and in using the methods effectively.

Olmstead, J.A. and Elder, B.L. *The Use of Management Games for Developing Army Officers in Administrative and Staff Jobs.* Human Resources Research Organization, Final Report ARI-TR-78-A2, 1978, 175 pp.

A research project was undertaken to provide a foundation for future research on the efficacy of games and simulations for use in training and assessing junior company-grade officers working in administrative, nontactical support, and staff jobs. Based on survey interviews with nineteen incumbents of Finance, Adjutant General, and Quartermaster Corps first-tour, entry-level jobs, work requirements, problem analysis, decision-making, and interpersonal tasks and problems were identified. A comprehensive literature review and state-of-the-art survey of simulation were conducted, and 351 games and simulations were surveyed to determine relevance for junior officers. After initial screening, the remaining 183 were intensively analyzed to identify processes and parameters involved in the games and simulations, and a descriptive model was developed to delineate their attributes. A methodology for evaluating management games and simulations in terms of effectiveness, efficiency, and the descriptive model was developed and applied to the sample 183. Fifty-two games and simulations identified as appropriate for the focal officers were catalogued with descriptions and evaluations as Human Resources Research Organization Research Product 77-22 (bound at the end of this research). In conclusion, a framework and guidelines for constructing games and simulations for training and assessment purposes were also developed.

Quackenboss, T.C. "White Collar Training Takes Many Forms." *Training and Development J.*, v. 23, No. 4, 1969, pp. 16-26.

Results indicate that the training of programmers and systems analysts absorbs 80% of the data processing training dollar. Five major areas of management and supervisor training are stressed: communications, human relations, decision-making, planning, and problem solving. "The most pronounced problem facing training is this: There is no realistic method to determine if the training has resulted in any behavioral change in the trainee." Most clinical training is related to job function. Sales training is usually administered by the sales manager.

Recknagel, K.H. "Why Management Training Fails and How to Make it Succeed." *Personnel J.*, v. 53, No. 8, 1974, pp. 589-597.

Points out that many efforts to improve managerial capability fall short of their goal and produce more talk and paperwork than substance. It is suggested that a new focus on the individual can make the difference between success and failure. Fourteen proposals, which range from personalizing the program to building an ethical system, show how the structure and process of any development effort can be improved.

Shaw, M.E. and Rutledge, P. "Assertiveness Training for Managers." *Training and Development J.*, v. 30, No. 9, 1976, pp. 8-14.

Assertiveness training helps the manager to clarify what he wants to do and to begin doing it. While valuing the capacity to be open, expressive, and responsive to others, he learns how to identify and protect himself against aggressive or manipulative behavior from others. (Educational Systems and Designs Inc., Westport, CT).

Smith, P.B. "Attitude Changes Associated with Training in Human Relations." *British Journal of Social and Clinical Psychology*, v. 3, No. 2, 1964, pp. 104-112.

Members of training groups in human relations change their attitudes toward social behavior in a way that members of other groups do not. Those trained showed a convergence toward median scores on scales measuring their attitudes toward power and close personal relationships. These attitudes were found to be related to perceptions of their actual behavior by other group members. Perceptions of the behavior of those scoring median on the attitude scales were generally consonant with current descriptions of "effective" behavior (16 ref.).

Stogdill, R.M. *Handbook of Leadership; A Survey of Theory and Research*, The Free Press, New York, 1974, 613 pp.

This book is a comprehensive survey of leadership theory and research findings. It contains a section concerned with leadership training.

Stroh, T.F. *The Uses of Video Tape in Training and Development.* American Management Association, New York, N.Y., 1969, 59 pp.

Video tape recording systems are used in a variety of ways in training programs for commerce and industry. A questionnaire, which drew responses from about 200 companies, identified the advantages as well as the problems of video tape usage. Many of its uses in training of industrial and sales personnel involve role playing, which in itself presents particular problems if it is not to create a threatening situation for the trainee. Most of the companies surveyed felt that their investment in video tape equipment was worthwhile. (Appendix includes a list of universities and colleges offering courses in video tape recording; equipment manufacturers; and the questionnaire sent to companies using video tape recording for training).

Wohlking, W. "Management Training: Where Has It Gone Wrong?" *Training and Development J.*, v. 25, No. 12, 1971, pp. 2-8.

Examines the success of training programs via both conventional and newer "process" techniques in achieving improved managerial performance. It is noted that voluminous research has failed to support the effectiveness of conventional methods. Literature is also cited to show that "process" methods (e.g., sensitivity training) have not been much more effective. Data from the social sciences is reported indicating that behavior frequently is a function of structure. It is concluded that the commonly used model that attitude change leads to behavior change is not supported by evidence and ought to be reevaluated. Four suggestions are made for shifting the training emphasis: job enrichment programs, programs to support new policies and procedures, increased stress on understanding existing organizational structures, and additional use of structural change concepts in training programs (26 refs).

REVIEWS

Fox, H., Walton, S.D., Kirchner, W.K. and Mahoney, T. "Leadership and Executive Development; a Bibliography." *University of Minneapolis Industrial Relations Cent. Bulletin*, No. 14, 1954.

The 417 items (293 annotated and 124 listed only by title) from the literature on leadership and executive development are classified as summaries of literature, criteria of leadership, characteristics of leaders, executive jobs, selection of executives, and training and development of executives.

Golden, O.H. *Training Techniques: A Bibliographic Review.* Industrial Relations Center, University of Chicago, Chicago Ill., 1955, 23 pp.

This review discusses training techniques: conference method, case method, role playing, forced leadership training, and various group meetings—panels, the forum, the workshop, the lecture. Audio visual aids are also discussed. Significant sources in management, organization, and industrial relations are mentioned for each technique.

Kohn, V. (Comp.). *A Selected Bibliography on Evaluation of Management Training and Development Programs.* American Foundation for Management Research Inc., Hamilton, N.Y., 1969, 25 pp.

Prepared for those interested in program evaluation, this bibliography (largely annotated) on management development and training contains 61 items published between 1958 and early 1969. Citations have been grouped into five categories: descriptions of research studies; literature reviews; discussion of evaluation techniques; surveys of corporate practices; and books (eight references). Such aspects as participant satisfaction, interpersonal competence, sensitivity and human relations training, program planning, behavior and attitude change, reinforcement, and the Management Grid approach are represented. Topics not covered include evaluation of undergraduate management courses of manager training programs conducted under university auspices; assessments of programmed instruction as a management development technique; and military research. An author index and a list of periodicals are included.

Merrill, H.F., and Marting, E. (eds.). *Developing Executive Skills: New Patterns for Management Growth.* American Management Association, New York, 1958, 431 pp.

In recent years several matters relating to management development have undergone a change in philosophy and approach. In light of these changes the editors looked over an earlier publication of the American Management Association entitled: The Development of Executive Talent, and found that the changes were so large that virtually a new book was required. The result is this volume by 38 authors from the field of executive development. The major headings of the book are: Essentials of management development and a look at company experience. 11-page references.

Mosvick, R.K. "Human Relations Training for Scientists, Technicians, and Engineers: A Review of Relevant Experimental Evaluations of Human Relations Training." *Personnel Psychol.*, v. 24, 1971, pp. 275-292.

The main focus of this article is an examination of the methodology and results of experimental evaluations of human relations courses for technical professionals. This article contains a discussion of why human relations training is needed for technical professionals, a review of eight studies (four standard training and four T-group training), and a discussion (using studies as reference) of the questions: a) Are personality factors significant in influencing human relations training outcomes? b) Is human relations training less effective with this group than with other somewhat different industrial groups; and c) Which type of human relations training, "standard" or "T-group" seems better adapted to conditions of technically-oriented professionals?

Stephenson, H. "Evaluating Human Relations Training." *Personnel Adm.*, v. 29, No. 4, 1966, pp. 34-39.

Efforts to evaluate training in human relations are reviewed and some questions pinpointed.

TRAINING PROGRAMS

Buikema, L., and Many, W. *A Summative Report of the Leadership Training Program.* Elk Grove Training and Development Center, Arlington Heights, Ill., 1969, 127 pp.

An ESEA Title III program to improve leadership capabilities of educators was conducted in both actual and model school settings during 1966-69. Participants included staff personnel, consultants, administrative and teaching personnel from cooperating school districts, and board of education members from a consortium school. This report discusses the program rationale as related to institutional change, and defines the major purpose as improvement through training in leadership skills for educators who occupy change agent roles. Major activities and components of the program are described. The report concludes with recommendations for future programs and an evaluation of the success in developing leadership skills among program coordinators and leadership workshop participants.

Burke, W.W. "A Seven Hour Workshop in Interpersonal Communication." *Training and Development J.*, v. 23, No. 7, 1969, pp. 4-10.

This article discusses an approach to conducting an experience-based learning activity in interpersonal communications. The seven hour workshop consists of three basic elements: 1) some prior reading and a lecture and a handout on interpersonal communication, 2) several small group exercises, and 3) administration of and feedback from a paper-and-pencil training instrument.

Civil Service Commission. *Executive and Management Curriculum: General Management Training Institute.* Regional Training Center, Chicago, Ill., 1975, 14 pp.

The document contains a general information sheet, a curriculum calendar for 1976, and course descriptions for the following General Management Training Institute courses: advanced management seminar, executive seminar, management and group performance, management of scientific and engineering organizations, managerial decision making, middle management institute, and workshop for middle managers. Each course description contains: a statement of the audience the course was designed for, a description and a list of objectives of the course, an explanation of the delivery methodology, a list of topics covered, and the cost.

Civil Service Commission. *Special Curriculum: General Management Training Institute,* Regional Training Center, Chicago, Ill., 1975, 22 pp.

The document describes the special curriculum course offerings for the General Management Training Institute. It contains a general information sheet, a curriculum calendar for 1976, and course descriptions for the following courses: administrative officer seminar, analyzing managerial key results areas and formulating objectives, creative problem solving, management briefing, management by objectives, management orientation, management of time, managing and improving work systems, organization development seminar, team building for organizational effectiveness, and understanding and managing human behavior. Each course description contains: a statement of the audience the course was designed for, a description and a list of the objectives of the course, and explanation of the delivery methodology, a list of topics covered, and the cost.

Civil Service Commission. *Supervision and Group Performance, Instructor's Guide.* Bureau of Training, Washington, D.C., 1970, 540 pp.

This guide outlines a course designed to give first-line supervisors in the federal government an understanding of leadership concepts. The methodology of the course is a series of problem-solving conferences. There are 16 sessions in the course: 1. Problem census and introductions; 2. The job; 3. Filling a job - Federal Merit Promotions Policy; 4. The individual at work - Equal employment opportunity; 5. The work group; 6. Leadership—authority, power, and influence; 7. Observing a group; diagnosing the situation; 8. Collecting facts about group task and group maintenance functions; 9. Bringing about change; 10. The man in the middle, the supervisor—Labor-management relations; 11. The new employee; 12. Learning and training; 13. Evaluating; 14. Dealing with departures from standards; 15. When an employee has a personal problem; and 16. Summary and Evaluation.

Civil Service Commission. *Supervision and Group Performance; Instructor's Guide: Interagency Training Program.* Bureau of Training, Washington, D.C., 1975, 253 pp.

The instructor's guide to the course designed to acquaint supervisors with such behavioral science theories as motivation, leadership, group dynamics, and change, stresses student participation through group discussion, role-playing, incident-process case discussion and management simulation or games. The course is organized around four themes (each containing several topics): individual employee (motivation, motivation-hygiene theory, job enrichment, management by objectives, and labor management relations); individual supervisor (leadership styles and communication); employee as part of a group (group decision-making and formulation of primary groups); and supervisor as part of a group (specific leadership roles within groups, resistance to change, and problem-solving). For each topic (as well as for an introductory section) the guide provides: (1) preparation information including a statement of behavioral objectives and notes to the instructor covering the purpose of the module, main concepts, typical participant reactions, any special advance preparation, reading sources for each module, necessary visual aids and materials, and applicable trade secrets; and (2) a presentation guide which is divided into a right and a left hand section, the former containing detailed topic presentation, and the latter providing, at appropriate points, basic teaching process instructions. Fifty-six pages of the handouts are appended.

Civil Service Commission. *Supervisory Curriculum: General Management Training Institute.* Regional Training Center, Chicago, Ill., 1975, 17 pp.

The document describes the supervisory course offerings of the General Management Training Institute. It contains a general information sheet, a curriculum calendar for 1976, and course descriptions for the following courses: basic management functions, basic management methods and skills, communicating and counseling, increasing (improving) supervisory skills, introduction to supervision, leadership and supervision, supervision and group performance, supervision in the public service, and management in practice. Each course description contains: a statement of the audience the course was designed for, a description and a list of the objectives of the course, an explanation of the delivery methodology, a list of topics covered, and the cost.

Fry, J.P., and Cliborn, R.E. *Development, Implementation and Evaluation of Leadership/ Management Training Within Army Battalions: 1.* Human Resources Research Organization, Summary of Findings, Final Report, 1975, 91 pp.

This is a report on an in-unit, leadership/management training program based on experiential training methodology. The program was developed to provide Army leaders with behavioral skills and techniques. Program objectives were to: (1) train key leaders of three units in concepts, principles and techniques of individual and group problem-solving, management by objectives, and performance management; (2) provide follow-on consultation; (3) evaluate training and consultation in terms of acquired knowledges and skills, attitudes, command indicators, performance of mission, and potential for implementation in other Army units.

Guarino, S. *Communications for Supervisors.* Distributive Education Materials Lab., Ohio State University, Columbus, Ohio, 1974, 120 pp.

The essentials and techniques of effective communication are presented in the guide designed as a source book for leaders conducting a communications seminar. General suggestions for leading a group discussion and some specific suggestions for activities which involve the seminar participants are presented. Factual information relating to effective communication and providing a basis for discussion is arranged by topical heading. The guide is divided into six units entitled: (1) purposes and people, (2) responsibilities and roadblocks, (3) persuasion and principles, (4) listening and leadership, (5) media and messages, and (6) motivation and management. Appended are supplemental aids including activities, handouts, and transparency originals.

Hoehn, L.P. (ed.). *Leader Training Program.* Michigan-Ohio Regional Education Lab., Inc., Detroit, Michigan, 1969, 85 pp.

This document describes the Leader Training Program (LTP) component of the Teaching Behavior Improvement Program (TBIP). The LTP was funded under ESEA Title III and was designed to train school-based inservice leaders to implement the TBIP in their districts. The document suggests possible grouping of participants, materials, equipment, physical arrangements, and other logistics for conducting a leader training conference. A "Conference Planners Checklist" is included. The curriculum is described in terms of the leaders' roles in implementing the TBIP. An evaluation design is presented and the data-gathering modes used in the workshops are described. Results of the workshops are summarized. The appendices contain a detailed daily schedule of a workshop and some materials used in evaluating the workshop's progress.

Hollenbeck, G.P., and Timmons, G.W. "A Job-Oriented Management Workshop." *J. Commun.*, v. 18, No. 2, 1968, pp. 144-150.

Describes a management workshop which is designed to increase effectiveness within managerial groups for three levels of management. The workshop emphasizes a structured analysis of job and function, rather than individuals. Prior research indicated the need for managerial learning in the five workshop topic areas: organization posture, objectives of the manager within group, barriers to meeting objectives, analysis of organization environment, and action required to meet objectives.

Hunsaker, P.L. *Leadership Assessment and Training Simulation; Field Application and Faculty Training System.* Wisconsin University, Milwaukee, School of Business Administration, ARI Final Technical Report DAH-C-19-74-C-0042, June 1975, 19 pp.

In previous research a pilot simulation was developed for use by Reserve Officers Training Corps (ROTC) units in assessing leadership potential of officer candidates in turbulent-field environments. Peer and instructor rating forms were also developed for evaluation of leadership, decision style, ability to cope with stress, and interpersonal effectiveness. Five objectives were accomplished under the research extension contract reported here: field testing and operationalization of the revised simulation for use on representative ROTC campuses, refinement and preliminary validation of the behavioral style rating scales, development and application of a multimedia training system for instructing faculty in the use of the simulation and assessment battery, and follow-up of the simulation's assessment capability. The final version of the simulation, entitled The Leadership Effectiveness Development Simulation (LEDS), enables participants to develop leadership and interpersonal skills and exhibit realistic and relevant behaviors in these areas for diagnostic purposes. The LEDS can be administered in four 50-minute periods: introduction and initial involvement, the simulation experience, completion and diagnosis, and personal feedback. This report includes a description of the simulation including the setting, physical facilities, roles, simulation operations, scoring and evaluation, leadership diagnosis using the Leadership Description Scale (LDS), and feedback procedure. A list of documents and materials that comprise the LEDS is also included.

Maier, N.R., Solem, A.R., and Maier, A.A. *Supervisory and Executive Development.* John Wiley, New York, 1957, 330 pp.

This is a manual for role playing designed as a training manual for supervisory and executive training and for study groups with no designated trainer. The introduction explains the case organization and role playing procedures. Twenty cases are presented which include descriptions of the roles, focusing the problem, general report and analysis, and comments and implications. About half of the cases illustrate principles in management leadership, conference skills, ways of recognizing and dealing with feelings, and problems in group settings. The remainder illustrate principles of effective relations and mutual understanding between individuals.

Migyanka, J. "A Self-Instructional Supervisory Training Program? Improbable But . . .," *Training and Development*, v. 32, No. 10, 1978, pp. 18-20.

High turnover rates for newly hired first line supervisors prompted an investigation; training and orientation to the organization were found to be at fault. A Supervisor's Training and Reference Manual containing 12 chapters was created; manual consisted of orientation self-checklist, an explanation of the training process, a 10 day agenda, and 200 blank pages. Trainee was programmed to fill blank pages, and could control method of instruction, pace, and subject matter. At the end of each learning day, manager, supervisor, and author interviewed trainee, reviewed documentation in manual, clarified issues, provided input, and restated expectations. Program has been successful: no drops in operating efficiencies, performance evaluations meet expectations, and no new supervisor turnover.

Miller, R.D. "A Systems Concept of Training," *Training and Development J.*, v. 23, No. 4, 1969, pp. 4-14.

Reports on a leadership training program in which the training model was conceptualized as being an interrelated process of five phases: needs assessment, objective setting, design, implementation, and evaluation. The program included depth interviews with all levels of management. Three styles of leadership emerged: one group saw leadership as peripheral, one central, and one group was primarily task specialists. Appraisals by their managers showed the 1st group was rated higher than others. Training needs were defined. "The prime purpose was to increase cognitive knowledge rather than to change behavior or attitude." After the program, trainees, as a group, indicated that leadership was the most important aspect of their total job. Based on their managers' ratings, moderate changes in behavior on the job occurred.

Miltz, R.J., and Kanus, L. *Improving Supervisors' Interpersonal Communication.* University of Mass., 1977, 9 pp.

This document describes a program to improve the leadership skills of school supervisors. The emphasis is upon effective communication. Training sessions involve small groups. Each participant has the opportunity to play the role of teacher and supervisor in a short teaching session which is videotaped. Immediately following the session, feedback in the form of discussion, consultation, and viewing of the tape helps the participant to single out basic skills in communicating that are in need of improvement. Eight particular skills are identified as being of prime importance for a supervisor to possess in dealing with teachers. (1) attending behavior—demonstrating interest and listening attentatively; (2) leading—inviting verbal expression and opening lines of communication; (3) focussing—isolating the important points under discussion and keeping them uppermost in the conversation; (4) questioning—asking questions that will elicit the most response and encourage further understanding; (5) clarifying—understanding the perceptions of a situation and another's point of view; (6) reflecting feeling—sympathetic understanding of problems; (7) respecting—displaying a positive regard for the other person; and (8) summarizing—clearly reviewing the conversation illustrating a complete understanding of the situation under discussion.

Minor, B.J. *Supervisor Training: A Comprehensive Training Program for Manpower Development Supervisors: A Course Monograph. No. 7 in a Series.* Oakland University, Rochester, Mich. School of Education, 1975, 52 pp.

This paper describes how a five-day supervisor training program was designed and offered cooperatively for the personnel department of a city of 100,000 population. It includes the content and related learning experiences which were developed for the training and an evaluation of the results. The course covers basic supervision skills for newly appointed supervisors of personnel who are employed by cities, townships, and community agencies funded in part by Comprehensive Employment and Training Act (CETA) funds, such as procedures for outlining, directing, facilitating and evaluating the work of CETA employees. The course was developed for use as a component of the undergraduate program in Human Resources Development at Oakland University.

Ohio Distributive Education Materials Lab. *Human Relations Revised. A Training Course for People Who Manage People.* Ohio State University, Columbus, Ohio, 1975, 192 pp.

A revision of the leader's manual, "Human Relations Training for Supervisory Personnel in Sales and Merchandising Organizations," the human relations training manual for supervisors consists of eight two-hour sessions. The first session is devoted to laying a framework for developing a human relations attitude. The second, third, and fourth sessions are devoted to the "four keys of good human relations." Session five covers communication. Grievances and discipline are covered in session six, and the seventh and eighth sessions cover the "four step method to problem solving." Materials for handouts and transparencies are provided at the end of each session.

Sorcher, M. and Goldstein, A.P. "A Behavior Modeling Approach in Training." *Personnel Adm.*, v. 35, No. 2, 1972, pp. 35-41.

Describes training programs in which supervisors learn to overcome their defense mechanisms or conflicting attitudes and modify the way in which they supervise subordinates. The program is based on the principles of imitation and practice. The first part of the program entails a discussion of leadership behavior as opposed to attitudes and conceptions. Situations are then presented on film or videotape showing a model practicing good behavior and receiving reinforcement or reward. Program participants then act in or observe role-playing situations between a supervisor or subordinate. The problem of motivating an employee is used to illustrate a typical problem covered in such programs. Expectations for these programs are preliminary results from experimental programs are discussed. Details concerning the program format are noted.

TRAINING METHODS

Argyris, C. "T-Groups for Organizational Effectiveness. *Harv. Bus. Rev.*, v. 42, No. 2, 1964, pp. 60-74.

This article describes T-groups, discusses the effect of T-groups on corporate executives, attempts to correct misunderstandings about laboratory education, and discusses the impact of T-groups on organizations. The author feels laboratory education (sensitivity training) is a powerful education experience if it is conducted competently and if the right people attend.

Boyd, H.A. "The Buzz Technique in Training." *Personnel*, v. 31, 1952, pp. 49-50.

A large group may be broken down into smaller groups called "buzz" groups, which then operate as problem-solving or discussion groups and report back to the main body. This technique may be used to illustrate approaches to the same problem, or each group may be assigned a portion of the main topic.

Byham, W.C. "Changing Supervisory Behavior: I. Problems With Conventional Training." *Training and Development J.*, v. 31, No. 4, 1977, pp. 3-6.

Since desired behavioral changes often do not result from training alone, more emphasis is being placed on job enrichment and behavior modification. Some studies even suggest that the interpersonal skills of executives tend to decrease over the years, indicating that experience is not the best teacher. Still, the right kind of managerial developmental program, consisting of all on-the-job activities, offers the best potential to change behavior. Attention to psychological principles of learning, such as the importance of feedback and insuring appropriate models, is important. Similarly, the opportunity of working with a particularly skilled supervisor can be valuable.

Byham, W.C. "Changing Supervisory and Management Behavior: II. *Training and Development J.*, v. 31, No. 5, 1977, pp. 10-16.

Outlines numerous "laws of behavior change." Adequate diagnosis of training and development needs is essential, and the immediate supervisor is vital in bringing about change. Managers must be given suggestions on how to develop subordinates, and trained in these methods. Higher management also must be involved. The individual's needs must be considered. Developmental plans must be committed to writing. A follow-up procedure must be instituted. Change is difficult and results only from a massive coordinated effort directed toward a specific target. These laws can be followed and do result in behavioral change. Through a proper combination of training and development, a proven success of interaction management training programs can be repeated.

Byham, W. and Robinson, J. "Interaction Modeling: A New Concept in Supervisory Training." *Training and Development J.*, v. 30, No. 2, 1976, pp. 20-33.

This article describes interaction modeling, a fast-growing method of improving supervisory skills with emphasis on positive models of behavior and a step-by-step approach to handling practical situations. No theory is taught since specific skills are the goals. Commercial materials are available with each module standing by itself so that an organization can choose modules with problem situations of particular concern to its supervisors. Selection of modules, the role of classroom administrator, and contributing factors to training program failure are discussed.

Civil Service Commission. *Managerial and Supervisory Training Techniques and Methods.* Bureau of Training, Washington, D.C., 1977.

Designed as an aid for selecting methodology for training supervisors and managers, the material in this booklet is presented in four sections: (1) group discussion methods (several methods which can be used as alternatives, to formal classroom training—symposium, conference, forum, workshop); (2) group participation techniques (strategies to intensify participant involvement—role playing, case study, brainstorming, in-basket exercise, managerial games, laboratory training); (3) information presentation techniques (traditional lecture and other presentation techniques which stress a one-way transfer of information from instructor to learner, e.g., instructional television); and (4) individual development methods (learning experiences the participant can undertake at his or her own convenience, with the help of others, and outside the classroom, e.g., self-paced instruction). A description of each approach is given along with its advantages and disadvantages. Also provided are brief comments on developing or obtaining the necessary materials and on the main procedures for using each method or technique. Related approaches are listed for most items. Sources of detailed information about each approach are also suggested.

Ellis, A., and Blum, M.L. "Rational Training: A New Method of Facilitating Management and Labor Relations." *Psychological Reports*, v. 20, No. 3, 1967, pp. 1267-1284.

Rational training is a method of teaching basic principles of interpersonal relations to groups of individuals and is particularly applicable to all levels of management in business and industry, to labor officials, to military personnel, and to others who work in the area of people contact. It differs significantly from sensitivity training, group psychoanalysis, and conventional management training courses. It shows members of the training session how to eliminate fears of failure, how to be more tolerant and less hostile, how to gain their own unqualified self-acceptance, and how to achieve high frustration tolerance. Rational training differs from most group training in that directiveness, activity, structuring, authoritativeness, and homework assignments are employed. An illustrative protocol demonstrates some of the details of how rationale training actually works.

Fiedler, F.E., Mahar, L., and Chemers, M.M. "Leader Match IV: Programmed Instruction in Leadership for the U.S. Army." Washington Univ., Seattle, Department of Psychol., Final Report ARI-TR-77-TH3, 1977, 246 pp.

LEADER MATCH IV is a programmed instruction manual developed for the U.S. Army based on the Contingency Model of Leadership Effectiveness. The contingency

model shows that the performance and success of a group or organization is contingent or dependent not only upon the leader's personality but also on the situation in which he must operate. LEADER MATCH IV has been evaluated in civilian and Army settings; leaders trained by this method performed more effectively than comparable untrained leaders.

Fredriksen, C.W., and Martinson, H. "Helping Supervisors Train Themselves in Human Relations; a Case Study." *Personnel*, v. 31, 1955, pp. 323-334.

When participants in a supervisory development program discussed disguised problem cases arising from their own operating experiences, the result was heightened interest in and an expanded outlook upon their training. Special efforts were also made to conduct training in such ways as were consistent with what the supervisors perceived their own status to be, e.g., by allowing them to retain control of the discussion and by minimizing threats to status.

Huttner, L., and Zimmerman, J. "Supervisory Training: The Conference Method." *Personnel*, v. 33, 1956, pp. 250-258.

"Evaluating its two years' experience in training first-line supervisors through group discussion, Pillsbury Mills has found that the conference method can help to develop more favorable attitudes, as well as to eliminate specific operating problems." Samples of illustrative material used in the program are included.

Jennings, E.E. "Advantages of Forced Leadership Training." *Personnel J.*, v. 32, 1953, pp. 7-9.

The Forced Leadership method of training foremen gives practically every foreman some experience in leadership. In addition it gives all the foremen experience in working together and an opportunity to really experience democratic leadership. It puts foremen of more equal abilities and leadership experience together, so that the less experienced foreman has more opportunity to emerge as a leader and the more experienced foreman is encouraged to further develop his leadership abilities.

Kowski, F., and Eitington, J. *The Training Methods Manual*, Stephen J. Mather Training Center, Harpers Ferry, W. Va., 1976, 112 pp.

This manual is designed to (1) acquaint service supervisors and instructors with general principles of instruction; (2) familiarize them with the more common methods of individual and group instruction so that they will use the methods most adaptable to the subject matter and to the particular group being trained; and (3) offer an understanding of the basic tools of instruction so they can improve the effectiveness of all service activities. Emphasis is given to different methods of individual and group instruction. The individual methods described include the Four-Step Method, the Coaching Method, individual development plans, cross-training, special assignments, acting assignments, understudies, committee assignments, and programmed instruction. Group methods include lecturing, demonstration, staff meeting, conference, critique, buzz groups, brainstorming, role-playing, panel

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discussion, group problem-solving, case study method, in-basket exercise, fishbowl, instruments, films, film evaluation, training with TV, learner controlled instruction, tools to aid the instructor, lesson plans, use of training aids, flip charts and chalkboards, the art of questioning, and handouts. An introductory section covers the learning environment, teaching principles, and characteristics of the adult learner.

Kuriloff, A.H., and Atkins, Stuart. "T-Group for a Work Team." *J. Appl. Behav. Sci.*, v. 2, No. 1, 1966, pp. 63-93.

This case history tells of the use of T-Group training to improve interpersonal competence in a small manufacturing company. The beneficial effects enabled the company to accomplish specific and general tasks, producing economic gain, which would not have seemed possible prior to the T-Group. Specific examples of such accomplishments are given. Certain findings are reported about the methods used in this T-Group. These suggest that effective results in a T-Group for a work team may be attained by (1) a prior level of trust in the boss, (2) presence of the boss in all T-Group sessions, (3) intention of learning on the job, (4) emphasis on improving individuals' interpersonal competence primarily for the sake of the business, (5) confrontation of each person as seen by others, and self-disclosure of personal feelings between people. The case history is in two parts—the company background prior to the T-Group, and the day-by-day account of the dramatic highlights of each session.

Leedham, J. (comp.). *The Imaginative Uses of Closed Circuit Television in the Training of Staff and Managers.* Case Studies Collected and Edited for the Association for Programmed Learning and Educational Technology, 1974, 91 pp.

More than 20 case studies exemplifying innovative techniques in the use of closed circuit television for employee training in organizations not primarily dedicated to education have been collected. Case studies have been selected from the military, the medical professions, sports, and business organizations, primarily in Great Britain. Uses of closed circuit television include managerial and instructor level training, skills training, accident prevention, sales training, and product promotion. A summary of multinational use of videotape cassettes for training is included.

Maier, N.R.F. and Zerfoss, L.F. "MRP: A Technique for Training Large Groups of Supervisors and Its Potential Use in Social Research." *Hum. Relat.*, v. 5, No. 2, 1952, pp. 177-186.

Multiple role playing (MRP) is a technique that allows all members of a large audience to participate in the group discussion method; supervisors at the Detroit Edison Company are trained in leadership skills using this technique. Setting up the role-playing procedure is explained. A discussion of points to be covered when analyzing the results is given. Authors report on a typical case actually derived from an industrial problem involving distribution of equipment. Authors say MRP method can be used for all types of role-playing which are effective for attitude change and the development of skills. MRP is also useful for social research.

Monat, J., Patton, R., and Elias, D. "Improving Management Training Using Apprenticeship Principles." *Training and Development J.*, v. 29, No. 9, 1975, pp. 20-26.

This article reviews the critical aspects of an on-the-job management training program. Four commonly used but inadequate approaches are briefly reviewed; an integrated training design using off-the-job and on-the-job methods is described. Eight steps for an acceptable apprenticeship training design are discussed.

Morrisey, G.L. "How to Implement MBO in Your Organizational Unit." *Training and Development J.*, v. 31, No. 4, 1977, pp. 8-13.

Identifies several frequently used approaches to implementing management by objectives (MBO) and summarizes some key considerations for individual managers attempting to improve their units. The manager's own commitment is the first key factor. If willing to invest time, energy, and talent to make MBO (or its companion, management by results) effective, many procedures can be recommended. The managers first practice setting examples and involving selected individuals in action plans. They determine key result areas and persuade the boss and crew to accept their perception. Starting on a project basis with one unit to be developed as a model is recommended.

Morrison, J.H. "M-Scale: Encounter with Reality." *Training and Development J.*, v. 23, No. 10, 1969, pp. 20-21.

Discusses a "new approach to 'sensitization' training of supervisors and managers who supervise minority group employees. . . . The technique is encounter . . . [in which] the central problem is the resolving of black/white issues in the minds of the managers to minimize racist attitudes and their consequences . . . on the job." The M-Scale is an inventory of attitudes toward black/white relations. "Following full discussion of each item, most managers experience a reevaluation of many of the concepts to which they were originally committed . . ."

Morrison, J., and O'Hearne, J. *Practical Transactional Analysis in Management*, Addison-Wesley, Reading, Ma., 1977, 156 pp.

Shows how to make transactional analysis operational in organizations and how managers can increase their interpersonal skills. Methods of setting goals are described, and various exercises for individual or group use are included (Lawrence-Leiter & Co., Kansas City, MO).

Odiorne, G.S. *Training by Objectives: An Economic Approach to Management Training*, MacMillan Co., New York, N.Y., 1970, 361 pp.

In keeping with the current trend in business education, this book adopts a "systems" approach to training. Objectives are first defined, and then training theories and techniques are used to reach them. Economic and behavioral aspects of training are discussed and many new techniques such as sensitivity, motivational, and human relations training are critically evaluated. Part I deals with the economic

approach, pointing out the fruitlessness of many past training efforts in today's environment. Part 2 presents the systems approach as a means of reorienting training to economic objectives. Part 3 outlines the various kinds of learning theories, classified with hard criteria (specific measurable stimuli and responses) and soft criteria (internalized, subjective explanations of behavior), and shows why the demands of the seventies will be for hard criteria training. There are real-life cases, questions, summaries, and bibliographies for each chapter.

Pigors, P. and Pigors, F. "The Incident Process—Learning by Doing," in Bennis, W.G., Benne, K.D., and Chin, R. (eds.) *The Planning of Change: Readings in Behavioral Science*, Holt, Rinehart, and Winston, New York, 1961, pp. 710-715.

This article discusses the Incident Process, a method of analyzing cases through a series of group discussions. These discussions are based on a questioning process; the reader is led through an example of the application of the questioning process. Roles of a group's three leaders (director, team leader, observer-reporter) are discussed.

Quick, T.L. *Person to Person Managing: An Executive's Guide to Working Effectively with People.* St. Martin's, New York, N.Y., 1977.

Presents a guide for managers concerning all aspects of employee relations, including balancing expectations against motivations, dealing with problem workers, hiring, and firing, making meetings more productive, dealing with conflict situations, managing communication, and becoming an effective leader.

Speroff, B.J. "Rotational Role Playing Used to Develop Executives." *Personnel J.*, v. 33, 1954, pp. 49-50.

Role playing may be used to acquaint executives with other departments and give them an overall view of the plant problems and the interdependency of various departments. For instance, executives from two departments may be asked to play the role of each other's job. They are given a real problem, preferably involving both departments. After a week or two in which they may gather information to help solve the problems, they play the assigned roles before an audience consisting of people from their department. When they have finished, they first criticize their own performance, then each other's performance, and finally the audience is invited to criticize and evaluate the performance.

Speroff, B.J. "The Substitution Method in Role-Playing Grievance Handling." *Personnel J.*, v. 38, 1959, pp. 9-12.

Labor relations counselors were helped to handle and reduce grievances by participating in a role-playing training program in which they alternately played themselves and observed others play their role.

Zander, A.F. "Role Playing: A Technique for Training the Necessarily Dominating Leader." *Sociatry*, v. 1, 1947, pp. 225-235.

"Although most work in developing methods of leadership training has been concerned with democratizing the leader, and it is important that this continue, there is a need for human relations training of the necessarily dominating leader. This paper describes a brief method for the use of role-playing in training dominating leaders to work with their men as human beings. The brevity of the course made it necessary to concentrate on developing insights rather than allowing practice in specific leadership skills. The values, limitations, and difficulties in the use of this method are described."

EVALUATION

Ahr, C.J., Kapust, J., and Lawrence, P.S. "Behavioral Training of Supervisors in an Industrial Setting for the Blind." *J. Community Psychol.*, v. 5, No. 2, 1977, pp. 160-165.

Provided training in principles of behavior assessment and modification for eight first-line supervisors in an industrial situation employing the occupationally handicapped. Positive and negative statements by employees were carefully defined and targeted for change. Evaluation of training effectiveness was accomplished through the use of a multiple baseline design. Results suggest that training supervisors in the use of behavioral principles represented a significantly effective procedure in the modification of employees' statements reflecting dissatisfaction, primarily with management and supervisory personnel. The failure of this training to affect significantly positive statements suggests (a) that the effective use of praise by supervisors for positive employee statements is problematic within the circumstances of this study, and (b) the need for more powerful training procedures for increasing praise verbalizations.

Arnoff, J., and Litevin, G.H. "Achievement Motivation Training and Executive Advancement." *J. Appl. Behav. Sci.*, v. 7, No. 2, 1971, pp. 215-229.

Describes a study of the process of motive acquisition conducted with middle-level executives of a major American corporation. Each of 11 S's given a program designed to develop n Ach was matched with an S chosen to attend the company's executive development course during the same period. A two-year follow-up study shows participants in the n Ach training advancing more rapidly in job level and salary ($t = 1.79$, $p = .054$).

Baum, B.H., Sorensen, P.F., and Place, W.S. "The Effect of Managerial Training on Organizational Control: An Experimental Study." *Org. Behav. and Hum. Performance*, v. 5, No. 2, 1970, pp. 170-182.

The utilization of organization theory in the evaluation of managerial training is explored. The study was conducted in a large midwestern insurance company; the sample was selected from the claim processing function. Participants in a management training program involving the concepts and techniques of "power-equalization" and the "interaction-influence" model comprised the experimental group which was compared, on a before and three months after training basis, with a control group. Tannenbaum's control questionnaire was employed to determine the effect of such training on the organizational control structure. Change in the direction toward a more equalitarian control structure was found in the experimental group. The study was conducted by the authors, Baum, Sorensen, Jr. and Place.

Belasco, J.A., and Trice, H.M. "Unanticipated Returns of Training." *Training and Development*, v. 23, No. 7, 1969, pp. 12-17.

This article presents an evaluation of the supervisory training program effectiveness for a large New York organization. The training program for all organizational levels of supervisors utilized a conference case discussion pattern. The evaluation design and results, as well as a post training study are discussed.

Biggs, D.A., Huneryager, S.G., and Delaney, J.J. "Leadership Behavior: Interpersonal Needs and Effective Supervisory Training." *Personnel Psychol.*, v. 19, No. 3, 1966, pp. 311-320.

A study was conducted to evaluate a conference program for potential supervisors of youth opportunity centers. The objectives of the study were to describe 1) significant changes in the endorsement of leader behaviors and interpersonal needs at the conclusion of the conference, and 2) significant differences in the interpersonal needs of those subjects who endorse significantly different types or styles of leadership behavior. Subjects were 32 supervisors from the two-week conference.

Blocker, C.E. "Evaluation of a Human Relations Training Course." *J. Am. Soc. Training Directors*, v. 9, No. 3, 1955, pp. 7-8 and 46.

The Blocker (1955) findings must also be considered tentative because of the small sample and inadequacies of design. Nevertheless, the technique employed has intriguing possibilities. The course itself involved 10 two-hour meetings spread over an eight-month period. There were discussions, role-playing, and films devoted to such matters as responsibilities of the supervisor, leadership, motivation, employee cooperation and attitudes, counseling, and discipline. The primary emphasis was on psychological and social forces affecting behavior. The subjects were 15 insurance company managers at various levels in the organization. Seven of these were considered authoritarian on the basis of some two years of observation, while the remaining eight were defined as democratic. The measure was derived from the interview reports each manager was required to submit whenever he held a discussion with one of his subordinates. This was done on a standard form which was constructed so that the reports could be used to determine whether the interview had been conducted in an authoritarian or democratic manner.

Unfortunately, only interview reports submitted after training were analyzed and an adequate basis for a pretest-posttest comparison was therefore not available. A total of 357 interviews were studied, all those reported during the three months after the course ended. Of these 149 were conducted by the seven authoritarian managers, with 70.3 percent scored as authoritarian in approach. The eight democratic managers had 208 interviews and only 20.2 percent of these were authoritarian. It is clear that the authoritarians remained authoritarian and the democrats democratic after the management development experience. Thus, the hypothesized shift to a more uniformly democratic approach did not occur. But there may have been changes, nevertheless. A pretest measure, utilizing interview reports for a period preceding training, would be required to establish this point. The mere authoritarian-democratic categorization at pretest is too insensitive to permit an adequate comparison with the posttest measure. The results of the study, thus, remain inconclusive. Yet the approach is an extremely interesting one.

Buchanan, P.C. "Evaluating the Results of Supervisory Training." *Personnel*, v. 33, 1957, pp. 362-370.

The development and testing of a method for determining the effectiveness of a supervisory development project are described.

Burke, R.J. "A Plea for a Systematic Evaluation of Training." *Training and Development J.*, v. 23, No. 8, 1969, pp. 24-29.

A study on the impact of human relations training on business students' managerial ideology and beliefs is discussed in this article. The training was done in the form of a university elective course that covered topics such as causation of behavior problems, attitudes, frustration, leadership, group decision making and full delegation, individual differences and conflict resolution. Pre- and post-course appraisal instruments are discussed and data is presented. Results indicate that a university human relations course had 1) little or no impact on participants' stable, pervasive attitudes, 2) only slight effects on their beliefs about certain concepts, 3) no effect on the grouping of these concepts.

Carron, T.J. "Human Relations Training and Attitude Change: A Vector Analysis." *Personnel Psychol.*, v. 17, No. 4, 1964, pp. 403-422.

This study discusses an evaluation of a human relations training program for supervisors in terms of changed attitude. Subjects were 35 supervisors in the research, development, and engineering units of Ethyl Corporation. Both experimental and control groups were given the LOQ and F-Scale before and after training and after a 17-month follow-up. A statistically significant change from authoritarian to democratic attitudes in the experimental group was evident; this change persisted over a 17-month follow-up period. Evaluating training in terms of attitude change is discussed.

Castle, P.F.C., "The Evaluation of Human Training for Supervisors." *Occup. Psychol.*, v. 26, 1952, pp. 191-205.

Two attitude scales and a role-playing test have been used to measure change in attitude following different kinds of human relations training courses. Although change was not always detected, in those courses where there has been a change in supervisor's attitudes, there has also been a change in behavior. It is felt that the materials described may be of value in evaluating different training methods.

Csoka, L.S., and Bons, P.M. "Manipulating the Situation to Fit the Leader's Style: Two Validation Studies of Leader Match." *J. Appl. Psychol.*, v. 63, No. 3, 1978, pp. 295-300.

Two studies are cited in which LEADER MATCH, a self-programmed leadership training manual, was used with student military leaders. Twenty-six subjects in a controlled experiment and 37 in a field study attempted to manipulate their own leadership situation based on the prescribed contingency model match between their leader style and the favorableness of their situation. Both studies matched

experimental subjects against control groups over a three-month and six-week period, respectively. Rated performance of the experimental subjects was compared to the performance of control subjects at the completion of each study. In addition, the subjects in the experimental study were required to provide an analysis of the process by which they manipulated their situation to match their leader style. Results showed that leaders who used the manual, when compared with the matched controls, were rated significantly higher than their contemporaries in comparative performance ratings. Analysis of individual strategies provides for comments on the effectiveness, limitations, and utility of the programmed leadership training text.

DiVesta, F.J. "Instructor-Centered and Student Centered Approaches in Teaching a Human Relations Course." *J. Appl. Psychol.*, v. 38, No. 5, pp. 329-335.

This article discusses a study that evaluated outcomes of a human relations course and two methods of teaching the course. The study was limited to the questions: 1) is the 20-hour block of instruction in human relations sufficient to increase the achievement level of students; 2) if changes are made by the instruction, what is the extent and direction of this change at the: a) knowledge level, b) attitudinal level, and c) skill level; and 3) is one of the two methods of instruction more effective than the other.

Elsbree, A.R., and Howe, C. "An Evaluation of Training in Three Acts." *Training and Development J.*, v. 31, No. 8, 1977, pp. 12-19.

The decisions and actions involved in a training evaluation are described in the second of three articles. Act 1 covered the focusing phase of the project, to determine its purposes and scope. Act 2 deals with planning: producing a blueprint, a complete instructional package, to be presented to the client. Act 3 will portray the steps required to implement the plan.

Fleishman, E.A. "Leadership Climate, Human Relations Training, and Supervisory Behavior." *Personnel Psychol.*, v. 6, 1953, pp. 205-222.

A leadership training course for foremen in an industrial setting was evaluated, measures of leadership behavior as well as leadership attitudes were obtained, and the effects of such training were evaluated with respect to the kinds of "leadership climates" in the work situation to which the foreman returned. Findings indicate that such courses may produce unanticipated results when the foremen return to the industrial environment, the "back-in-the-plant" leadership climate being an important variable. Leadership is seen as an attempt at social change, and the purpose of leadership training is to produce a lasting change in behavior, the effective accomplishment of which in individual behavior involves some reorganization of the social environment.

Hand, H.H., and Slocum, J.W. "A Longitudinal Study of the Effects of a Human Relations Training Program on Managerial Effectiveness." *J. Appl. Psychol.*, v. 56, No. 5, 1972, pp. 412-417.

This study investigated whether a managerial human relations training program could change attitudes and whether these attitudinal changes were reflected in organizational effectiveness. Subjects were 42 middle management line and staff managers from a specialty steel plant located in central Pennsylvania. A control and experimental group were established and criterion-variables were measured both before the experimental Ss were subjected to the training experience and 18 months after training was completed. Significant attitudinal and performance changes were noted for the experimental group, while almost mirror-image changes were obtained for the controls. A "sleeper" or "lag" effect in the area of organizational development is discussed. Other implications of the study are discussed.

Harrison, K. "Group Training Within an Organization Development Project in an Industrial Company." *Interpersonal Development*, v. 3, 1972, pp. 80-99.

Describes the impact of a three-phase program for developing managerial skills in an international chemical plant. The plant was characterized by inefficiency, low morale, defensive attitudes among senior and middle managers, and dissatisfaction among supervisory personnel. The results of preliminary discussions and the effectiveness of external and internal consultants, compromises, and decision making are discussed in detail. The program was divided into three major phases: a series of short seminars to teach basic elements of organizational behavior (e.g., attitudes, perception and change); one-week laboratories in group dynamics; and an unstructured change program to solve specific problems. Problems with suspicion in participants, anxiety, and disputes between the company and white collar unions are examined, and solutions are described. The implications of such a large-scale program on organizational development theory and group training methods are considered.

Hazeltine, B.P., and Berra, R.L. "Supervisory Development—The Research Approach." *Personnel*, v. 30, 1953, pp. 60-67.

"The quantification of training needs and the measurement of results are certainly difficult processes . . . yet analysis of this type must take place if training programs are to survive and flourish." That the Monsanto supervisory training program is flourishing is an attest to the value of systematic quantification procedures used both in the assessment of needs and results of training. Illustrative segments of the Monsanto program are described in detail, complete with an explanation of measurement methods and results.

Hesseling, P. *Strategy of Evaluation Research: In the Field of Supervisory and Management Training*, Van Gorcum, Assen, Netherlands, 1966, 359 pp.

". . . describes concepts, methods and a strategy to help training officers and others responsible for implementing programs of change to carry out evaluation studies." Evaluation is defined as planning, controlling, and assessing the process of change in a systematic manner. Principles of perception, learning, and evaluation are presented in Part I; Part II describes the application of these principles in industrial situations; Part III "answers the question how optimal use can be made of the various methods and agencies available." Includes 4 appendices. (9 p. ref.).

Hood, P.D., and Johnson, J.N. *The Development and Evaluation of a Television Workshop in Human Relations.* Far West Lab. for Educational Research and Development, Berkeley, Calif., 1969, 119 pp.

A television workshop in human relations for teachers and other school staff was developed as a cooperative project involving the San Francisco and Oakland, California public schools, a unit of the University of California, the Far West Laboratory for Educational Research and Development, and KQED, the area's educational television station. This pilot project used the technique of audiovisual dramatizations of human relations problems relevant to these inner city schools. Group discussion or role playing followed the viewing of each film program. The report describes the development of the videotapes, the five programs, the discussion leaders and viewers guides, and various other components. One section presents an evaluation of the workshop in terms of context, input, process, and product. The results of this performance field test point to the utility and value of the programs which will be revised and improved on the basis of information collected from the evaluations.

Jennings, E.E. "Forced Leadership Training." *Personnel J.*, v. 31, 1952, pp. 176-179.

Two groups of 20 production supervisors were given 16 training sessions. In one group the trainees were required to develop a case study, the solution for which was presented by small groups. The leaders who developed, and were identified by their presentation of the results, were placed in the same group during the next session forcing the emergence of more leaders. In the control group the conference leader presented a problem and helped bring out a solution. Six months later more of the members of the experimental group than of the control group were ranked in the upper half of the group by their supervisors. Reliability of the method was indicated by a correlation of +.89 for the tendency to assume leadership when the process was repeated with the same group.

Katzell, R.A. "Testing a Training Program in Human Relations." *Personnel Psychol.*, v. 1, 1948, pp. 319-329.

A training program designed to improve understanding of human relations on the part of a group of experienced supervisors was evaluated in two ways: (1) by scores on alternate forms of the File-Remmers "How Supervise?" administered toward the beginning and at the end of an eight-week training program, and (2) by ratings by the trainees six months after the conclusion of the course. Sixteen two-hour training conferences were held to discuss topics dealing with the supervisor and his job, the supervisor and human nature, and the supervisor and leadership. Significantly higher questionnaire scores were obtained on the terminal questionnaire than on the initial one. Analysis of the questionnaire revealed that "the training program was most effective for supervisors whose opinions were most different from those of the experts to begin with, who were not highly experienced, and who were relatively bright," In general, the trainees rated the course as interesting, useful, and worthwhile.

Latham, G.P., Wexley, K.N., and Purcell, E.D. "Training Managers to Minimize Rating Errors in the Observation of Behavior." *J. Appl. Psychol.*, v. 60, No. 5, 1975, pp. 550-555.

Sixty managers in a large corporation were randomly assigned to a workshop, a group discussion, or a control group. The workshop and group discussion involved training directed toward the elimination of rating errors that occur in performance appraisal and selection interviews, namely, contrast effects, halo effect, similarity, and first impressions. Six months after the training, the results showed that (a) trainees in the control group committed similarity, contrast, and halo errors; (b) trainees in the group discussion committed impression errors; and (c) trainees in the workshop committed none of the errors. The importance of observer training for minimizing the "criterion problem" in industrial psychology is discussed.

Leister, A., Borden, D., and Fiedler, F. "Validation of Contingency Model Leadership Training: Leader Match." *Acad. Mgt. J.*, v. 20, No. 3, 1977, pp. 464-470.

Describes the results of a study that empirically evaluated a self-paced leadership training program called "Leader Match," based on the contingency model of leadership effectiveness developed by F.E. Fiedler (1964, 1967). The method instructs leaders to diagnose and match the situation to their own style of leadership; the main focus of the training is on task performance, although the importance of job satisfaction and morale is recognized. The training is presented in the form of a self-administered programmed workbook that includes the Least Preferred Co-Worker Scale. Data were obtained from 52 junior officers and chief petty officers from eight naval air squadrons and supporting air station personnel and 20 officers and petty officers from a destroyer. Performance ratings of the Ss were completed before and six months after training by three of the S's immediate supervisors. The performance evaluation scale assessed two leadership dimensions, a four-item performance factor and a leadership dimension. Results show that substantial improvement in performance can occur when leaders receive training with "Leader Match," a cost-effective and direct application of the contingency model and an approach which focuses on changing the situation to match the leader's style rather than vice versa. (15 ref.).

Lucas, G. *Evaluation of Human Relations Training Programs.* Bolt, Beranck and Newman, Inc., Final Report, NAVTRAEQUIPGEN 75-C-0071, Jan. 1977, 179 pp.

An evaluation was made of computer assisted instruction on human relations skills implemented on the PLATO IV computer system. These materials had been devised for use by company commanders (CCs) at Naval Recruit Training Commands (RTCs). A substantial improvement on the part of CCs, and recruits of CCs undergoing this instruction, was found. Also, case study scenario-based materials were implemented on PLATO IV for complementary training in interpersonal skills.

Mahoney, T.A., Jerdee, T.H., and Korman, A. "An Experimental Evaluation of Management Development." *Personnel Psychol.*, v. 13, 1960, pp. 81-98.

Using before and after training measures and a control group an evaluation was made of a one-week training program for 2nd-level managers involving the case

approach and group discussion. Those trained showed greater increase in scores in form of case analysis and attitude but not in knowledge of principles or intensity of analysis. Two methods of training did not differ nor were there instructor differences. Limitations of the case approach method of teaching management principles are pointed out.

Maloney, R.M. "Group Learning Through Group Discussion: A Group Discussion Implementation Analysis." *J. Soc. Psychol.*, v. 43, 1956, pp. 3-9.

A study was conducted to evaluate the effects on learning of two different group discussion approaches: the group implementation method, and no precise method. The study was also concerned with related variables: discussion content, verbal and behavioral participation, group geometry, sociometry, and statements of problems. Subjects were 30 Ohio State University students from educational psychology classes. Study procedure and results are described.

Morgan, G. "An Assessment of the Usefulness of the How Supervise? Questionnaire for Supervisory Training." *Stud. Personnel Psychol.*, v. 4, No. 1, 1972, pp. 57-66.

Evaluated the How Supervise? questionnaire as a method of initially identifying training needs and as a measure of change resulting from a supervisory training program. Data collected for 1st, 2nd, and 3rd-level supervisors (N=221) were analyzed to obtain the difficulty level of each item, internal reliability coefficients of each subtest, and (using five Managerial Grid styles as criteria) validity coefficients for each item and subtest. The How Supervise? questionnaire was found to be of questionable value, at least for the use to which it was being applied. Results indicate that (a) the questionnaire items were generally too easy and discriminated poorly among supervisory levels, (b) overall reliability was inadequate, and (c) the questionnaire lacks construct validity. (French summary)

Mosel, J.N., and Tsacnaris, H.J. "Evaluating the Supervisor Training Program." *J. Personnel Adm. and Industr. Relat.*, v. 1, 1954, pp. 99-104 [This article was also printed in *Engineering and Industrial Psychology*, v. 1, 1959, pp. 18-23.]

Eighty-three supervisory Air Force military personnel were exposed to a 40-hour, part-time, six-week supervisory training course. Forty-four other supervisors formed a control group. File and Remmer's "How Supervise?" was administered to both groups before and after the six-week period. The experimental group showed a small but statistically significant improvement to supervisory attitudes and judgment, and in attitude homogeneity. The control group did not improve or change in a statistically significant manner. It is noted that due to social or organizational climate, attitude improvement may not lead to improvement in the work situation.

Stroud, P.V. "Evaluating a Human Relations Training Program." *Personnel*, v. 36, No. 6, 1959, pp. 52-60.

A report of an attempt by the Bell Telephone Company of Pennsylvania to evaluate the effectiveness of a human relations training course called Personal Factors in Management. An effective measure of performance change was found in the areas which the training program covered. (Bell Telephone Co., Pennsylvania, Philadelphia).

Sykes, A.J.M. "The Effect of a Supervisory Training Course in Changing Supervisors' Perceptions and Expectations of the Role of Management." *Hum. Rela.*, v. 15, No. 3, 1962, pp. 227-243.

A study was done on the effect of a supervisory training course, and of group decisions made during the course, in changing the supervisors' perceptions and expectations of the role of management. It was found that although leadership training resulted in the intended change in trainee role expectations, the new expectations were so much in conflict with those of the superiors that within a year after the course, 19 of the 97 participating supervisors had left the company and 25 had applied for jobs outside the firm.

Buchanan, P.C. "Factors Making for Effective Supervisory Training." *Personnel*, v. 34, 1958, pp. 46-53.

"This article presents the findings from the third part of a program which attempted to (1) design and conduct an employee-development project to help first-line supervisors improve their job performance in specified respects; (2) devise and apply a criterion for determining the extent to which the project accomplished its goals; and (3) find not what contributed to any effectiveness the program had." As a result of the study the author reports the following: "1. What trainees say at the end of a training course about its usefulness has some validity. 2. The environment in which the trainee works influences the usefulness of a training course to him. It is important for the training staff to work with the superiors of those who are to take the training, both to insure understanding of and agreement on training objectives and the selection of people who are to attend. 3. The small training group is a factor influencing the effectiveness of the workshop, but the study contributes only speculation concerning what is important to the effectiveness of the small group. 4. The course proved to be effective in improving the supervisory practices of engineers and physical scientists as well as of other occupational groups. 5. Under ordinary conditions, a program lasting for at least three days and evenings, or four days, offers minimum effectiveness in human relations training."

Calhoon, R.P., and Jerdee, T.H. "First-level Supervisory Training Needs and Organizational Development." *Public Personnel Mgt.*, v. 4, No. 3, 1975, pp. 196-200.

Attempted to find the major training needs of first-level supervisors. 1,521 first- and second-level supervisors were surveyed as to their perception of training needs of first-level supervisors. Results indicate a need to approach training by examining and fostering supervisory skills at all levels of management.

Canter, R.R. "A Human Relations Training Program." *J. Appl. Psychol.*, v. 35, 1951, pp. 38-45.

This article discusses a study of two problems of human relations training: the need for systematic knowledge of what to teach, and how to measure outcomes. Objectives of the study were: a) to develop and present to a group of supervisors a course of systematic generalizations and principles covering a part of the area of human relations; b) to attempt to evaluate the course by measuring supervisory behavior the course was thought to change.

Crane, D.P. "Involvement Techniques for Manager Training." *Training and Development J.*, v. 26, No. 5, 1972, pp. 26-29.

Presents survey results from 81 companies with regard to incorporation of participative techniques in managerial training programs. Results indicate that group discussion was the most widely used technique (98%), and most respondents had also used role play and the case method. These tended to be used at all levels of management. Business games and related stimulations (used by 40%) were most heavily concentrated in executive development courses, oriented toward the needs of top managers. All participative techniques were considered effective to a high or moderate degree in at least 89% of the responses. Implications of the findings for instructor training are discussed.

Fleishman, E.A., Harris, E.F., and Burtt, H.E. *Leadership and Supervision in Industry.* Bureau of Educational Research, Ohio State University, Columbus, Ohio, 1955, 104 pp.

This monograph describes a research study of the leadership of the first-line industrial supervisor. This leadership is influenced by a systematic training program for foremen and also by the leadership of the foreman's own boss. The relationship of the different kinds of leadership to the efficiency and morale of the workers is discussed. The project was conducted under the supervision of the Personnel Research Board of the Ohio State University with the cooperation of the International Harvester Company.

Foreman, W.J. "Management Training Techniques." *Personnel J.*, v. 45, No. 9, 1966, pp. 548-552.

". . . for the purpose of collecting data that would help provide factual information on the use of management development and training programs by large corporations . . . the investigation sought to learn (1) what types of management training programs are used by large corporations, (2) what kinds of training techniques and courses are used in training management personnel, (3) what major sources of recruitment have been most productive in selecting management trainees, (4) what personal characteristics are considered most important when selecting management trainees, and (5) what educational backgrounds management trainees have had."

Friedlander, F. "The Impact of Organizational Training Laboratories Upon the Effectiveness and Interaction of Ongoing Work Groups." *Personnel Psychol.*, v. 20, No. 3, 1967, pp. 289-307.

This study was concerned with the impact of organizational training laboratories on an intact work group within an organization. Emphasis is on the importance of a work unit participating in training as a total group. The 91 subjects were from four organizational levels of the armed services largest research and development stations. Results indicate that significant improvements in effectiveness and interaction processes of work groups do occur as a result of participation in organizational training laboratories. These improvements take place in areas which are of direct personal and organizational relevance to members of the ongoing work groups and endure for a period of at least six months beyond the training experience.

Gassner, S.M., Gold, J., and Snadowsky, A.M. "Changes in the Phenomenal Field as a Result of Human Relations Training." *J. Psychol.*, v. 58, No. 1, 1964, pp. 33-41.

College students in a three-day human relations program were tested on an adjective checklist and a graphic rating scale used as indices of change in the phenomenal self. Predictions that a reduction in the trainees' discrepancy scores, between the self concept and both the ideal self and the image of the other were confirmed. However, similar changes were observed in controls. Differences between results for E and C groups were not significant. When a measure of attitudes toward democratic leadership was administered, a significant change was found for the E group while no change was observed in the C group. It was suggested that personality structure may be more stable than the reports of recent experiments indicate; methodological inadequacies of self rating scales may interfere with attempts to measure changes in the phenomenal self, and the measurement of attitudes other than those relating to the self should be undertaken in human relation studies.

Harris, E.F. and Fleishman, E.A. "Human Relations Training and the Stability of Leadership Patterns." *J. Appl. Psychol.*, v. 39, No. 1, 1955, pp. 20-25.

A supervisory training program was evaluated in terms of changes in the leadership behavior and attitudes of the trainees back in the work situation. Scores made on questionnaires administered before training were compared with scores obtained after training for an experimental group (with intervening training). The questionnaires employed were the Supervisory Behavior Description (worker descriptions of foreman behavior) and the Leadership Opinion Questionnaire (foreman's own leadership attitudes). Each questionnaire yields a score on two reliable and factorially independent dimensions called Consideration and Initiating Structure. The same general methodology was used to evaluate an original supervisory training course and also a refresher training course.

Harrison, R. "Cognitive Change and Participation in a Sensitivity-Training Laboratory." *J. Consulting Psychol.*, v. 30, No. 6, 1966, pp. 517-520.

Changes in concept preference in interpersonal perception were measured following laboratory training in interpersonal awareness or sensitivity training. The 115 S participants in a training laboratory described coworkers before and after training, using a modified form of Kelly's Role Repertory Test. Significant changes were found towards use of a greater proportion of inferential expressive concepts compared to concrete-instrumental ones. Changes were slight three weeks after training, increasing to significance after three months. Significant positive correlations were also found between concept change and ratings of active involvement in the training. The progressive change, plus the correlation between change and involvement, are interpreted as providing evidence that sensitivity training can affect the abstractness and complexity of concepts in interpersonal perception.

House, R.J. "Managerial Reactions to Two Methods of Management Training." *Personnel Psychol.*, v. 18, No. 3, 1965, pp. 311-319.

This paper presents (a) a review of selected studies concerned with managerial reaction to leader-centered and to student-centered methods of instruction, and (b) a report of a study that compares managerial reaction to these two methods immediately after completion of a management training program.

Hynes, K., Feldhusen, J.F., and Richardson, W.B. "Application of a Three-Stage Model of Instruction to Youth Leadership Training." *J. Appl. Psychol.*, v. 63, No. 5, 1978, pp. 623-628.

This study examined the cognitive, behavioral, and attitudinal effects of a three-stage leadership training program consisting of 12 instructional units administered to high school vocational education students in Indiana. The field test involved 30 classrooms and included the use of a control group (n = 12 classrooms) and three training groups (n = 6 classrooms per group). Each training group studied only four of the 12 instructional units. Results of the one-way analysis of variance indicated that the leadership training was effective in improving leadership knowledge as measured by a mastery test. Results did not show a significant change in either leadership behavior as measured by teacher ratings and self-ratings or leadership attitudes as measured by the Ideal Leader Behavior Description Questionnaire. The lack of change in leadership behavior and attitudes may support Fiedler's 1967 suggestion to change the leadership situation rather than the characteristics of the leader.

Ivancevich, J.M. "A Study of a Cognitive Training Program: Trainer Styles and Group Development." *Academy Mgt. J.*, v. 17, No. 3, 1974, pp. 428-439.

Studied two groups of 1st-level managers (n = 32) involved in a cognitive-oriented training program. The structured or directive style was more effective in achieving group cohesiveness, minimizing participant conflict, increasing communication, achieving group productivity, and encouraging a favorable attitude toward the trainer than was a less structured trainer style.

Jennings, E.E. "Trainees Grouped Themselves and Selected Their Problems." *Personnel J.*, v. 32, 1953, pp. 140-144.

After a conference leader used standard procedures for training supervisors in static groups and tried to get group agreement on solutions, a number of changes were gradually introduced. The trainees were allowed to choose their group for training, to shift from one group to another, were given suggested problems in writing a few days before each session, and were encouraged to suggest possible solutions before the session. As a result, greater agreement was achieved in the sessions, the attendance was higher and there was a marked increase in interest and participation by the members of the groups.

Kearney, W.J. and Martin, D.D. "Sensitivity Training: An Established Management Development Tool?" *Academy Mgt. J.*, v. 17, No. 4, 1974, pp. 755-760.

Surveyed 225 personnel and training directors in large manufacturing firms about the effectiveness of commonly used management development instruments (e.g., game theory, T groups, role-playing, and in-basket techniques). On-the-job experiences and job transfer were perceived as being clearly more effective than any other instrument. Sensitivity training ranked lowest among the named techniques, 109 respondents (48.4%) stated that they do not set aside any portion of their management

development program for sensitivity training. Seventy-eight respondents (70%) did not think that the use of sensitivity training in management programs would increase over the next five years. It is concluded that sensitivity training does not fill an important role in management development since it may be viewed as inappropriate for existing organizational goals or less effective than other techniques.

Klubeck, S., and Bass, B. "Differential Effects of Training on Persons of Different Leadership status." *Hum. Relat.*, v. 7, No. 1, 1954, pp. 59-72.

The purpose of this study was to demonstrate that for a limited specified quasi-real situation: (1) leadership status can be changed through brief training; (2) there are differences in the tendency of individuals to profit from training—some persons will increase their leadership status significantly more than others following training; (3) persons of initially higher leadership status are more likely to benefit from leadership training than those of initially lower leadership status.

Lange, C.J., Rittenhouse, C.H., and Atkinson, R.C. *Films and Group Discussions as a Means of Training Leaders*, Human Resources Research Organization, Technical Report 27, March 1956, 40 pp.

A leadership course of Army officers utilized sound films for the presentation of officer problems, based on descriptions of leadership situations collected from Army officers and NCOs in combat and noncombat areas. Each film terminated at the point where the leader was faced with making a decision and taking action; a small group discussion followed. A manual for instructors included the purpose of the course, the technique used, the function of the instructor, and narrative descriptions of the leadership problems. The course was used for leadership training, with control groups taking conventional classes. Analyses indicated that the experimental training was superior to the conventional training.

Lawshe, C.H., Bolda, R.A., and Brune, R.L. "Studies in Management Training Evaluation: II. The Effects of Exposures to Role Playing." *J. Appl. Psychol.*, v. 43, No. 5, 1959, pp. 287-292.

This article summarizes five studies conducted to evaluate role playing as a tool in management human relations training; the effects of single and repeated role playing experiences are studied. Experimental interest is centered on the most popular industrial method of role playing, skit completion. Authors carried out research through Occupational Research Center, Purdue University. Study procedure and results are presented. Authors conclude: "Within the comparative limitations imposed by the present research procedures, repeated exposures to role playing showed little advantage over the single, impact experience."

Levine, J., and Butler, J. "Lecture vs. Group Decision in Changing Behavior." *J. Appl. Psychol.*, v. 36, 1952, pp. 29-33.

This article discusses an experiment comparing group decision and formal lecture as methods of producing changes in socially undesirable behavior. The study was initiated because supervisors in a large manufacturing plant appeared to be rating

the grade of the job as well as performance of the individual workers. The experiment was designed to answer questions: a) is the acquisition of knowledge enough to lead a group of individuals to change a socially undesirable behavior pattern? b) is group decision a more effective method of producing a change in behavior than is the formal lecture?

Maier, N.R.F. "An Experimental Test of the Effects of Training on Discussion Leadership." *Hum. Relat.*, v. 6, 1953, pp. 161-173.

In continuation of previous studies, this study reports on the relative influence of training leaders to use a permissive approach (group decision method) as compared to the approaches generally practiced in business. Subjects were 320 supervisors in industry. The study procedure and results are discussed. It was found that the group decision method was more effective for leading a discussion.

Maier, N.R.F., and Hoffman, L.R. "Using Trained 'Developmental' Discussion Leaders to Improve Further the Quality of Group Decisions." *J. Appl. Psychol.*, v. 44, No. 4, 1960, pp. 247-251.

A study was conducted to test the hypothesis of Maier and Maier (1957) that the use of the developmental discussion technique by skilled leaders would reverse a majority trend toward poor quality decisions in the Case of Viola Burns. Authors designed study to determine whether the proportion of high quality decisions reached by the developmental discussion method could be increased when leaders were given a greater understanding of the method and a demonstration of its use. Study is compared throughout the initial study of Maier and Maier (1957).

Maier, N.R.F., Hoffman, L.R., and Lansky, L.M. "Human Relations Training as Manifested in an Interview Situation." *Personnel Psychol.*, v. 13, 1960, pp. 11-30.

The study was designed to determine whether the behavior of trainees in a role-playing interview could be improved through their experiences in an under-graduate course in the psychology of human relations. Three experimental groups were used. The results suggest that the typical human relations training course is neither long enough nor includes enough skill training to enable trainees to develop the skills that will change their behavior significantly.

Mann, J.H. and Mann, C. "The Effect of Role-Playing Experience on Role-Playing Ability." *Sociometry*, v. 22, 1959, pp. 64-74.

Ninety-six Ss were randomly assigned to 12 groups of eight which met for 12 one-hour meetings. Six groups engaged in role playing; three met in leaderless discussion; three discussed assigned readings. Ss were tested at the beginning and end in a situational test of role-playing. Significant increases were found in: ratings made by judges listening to tape recordings of the role-playing sessions, ratings made by other role players, role players' self-ratings, ratings by observers in the situational test, and judges' assessment of the number of roles taken by group members in the situational test. (16 refs.)

Mann, J.H., and Mann, C.H. "The Relative Effectiveness of Role Playing and Task Oriented Group Experience in Producing Personality and Behavior Change." *J. Soc. Psychol.*, v. 51, 1960, pp. 313-317.

This study compares the relative effectiveness of role playing and task-oriented study groups activity in producing behavioral and personality changes. Subjects were 72 students randomly selected from a graduate course in education. Those subjects were assigned to groups engaged in self-directed role playing or task oriented study activity. Study procedure, results, and conclusions are presented.

Mann, J.H., and Mann, C. "Role Playing Experience and Interpersonal Adjustment." *J. Counsel. Psychol.*, v. 6, 1959, pp. 148-152.

The relationship between role playing experience and "interpersonal adjustment" was investigated by means of six experimental groups engaging in leaderless role playing and three control discussion groups. Data obtained are suggestive of an increase in interpersonal adjustment which is attributed to the role playing.

Marshall, D.L. "The 'Incident Process' of Supervisory Training: Case Study of Experience in a Small Plant." *Personnel*, v. 31, 1954, pp. 134-140.

The "incident process" is a method of case study that approximates the step-by-step pattern followed in making decisions in actual work situations. When a group of supervisors followed this procedure, using a variety of case studies, the results were improved social skills and leadership ability, as well as heightened interest and participation in training.

Miles, M.B. "Human Relations Training: Processes and Outcomes." *J. Counsel. Psychol.*, v. 7, 1960, pp. 301-306.

A double control group approach was used in an investigation of human relations training. The principle variables were "sensitivity, diagnostic ability and action skill." Job performance and laboratory tests were used as criteria. "Personality inputs seem important mainly as facilitating factors during training; what counts is the person's actual transactions with the experiences of the laboratory . . . initial desire for change is no indicator at all of what learnings will emerge for the person."

Miner, J.B. "The Effect of a Course in Psychology on the Attitudes of Research and Development Supervisors." *J. Appl. Psychol.*, v. 44, No. 3, 1960, pp. 224-232.

This study was designed to determine the impact of a 15 hour course in psychology on attitudes toward supervisory work. Subjects were 102 supervisors in the Research and Development department of a large corporation. A major course objective was to foster a more favorable attitude toward the supervisory role; the course was primarily lectures. Study design, lecture content, results and conclusions are discussed.

Miner, J.B. *Studies in Management Education*, Springer, New York, 1965.

The first chapter of this book, "Design for the Study of Change," contains a discussion of the ideal research design and a review of supervisory and management

training in both universities and industry. The research reports are in the categories: before-after studies with a control group; after only studies with a control group; and before-after studies without a control group. An overview of the research is presented.

Newstrom, J.W. "Human Relations Training." *Training and Development J.*, v. 27, No. 4, 1973, pp. 3-6.

Assigned 45 third year business students to groups receiving five week courses in human relations for supervisors or management oriented training. Ss were pre- and posttested on a set of 20 simulated supervisory problems requiring classification. There were four problem classes: those requiring a behavioral solution, those requiring a technical solution, and those requiring a combination of both or neither. The experimental group differed significantly from the control group on the posttest. Implications for corporate training programs are outlined (Arizona State U.).

Osbzy, B.I., and Harrison, R. "Transfer from Here-and-Now to There-and-Then: Changes in Organizational Problem Diagnosis Stemming from T-Group Training." *J. Appl. Behav. Sci.*, v. 2, No. 2, 1966, pp. 185-198.

The assumption that the learning acquired by T-Group participants transfers to actual work situations was tested by means of the problem Analysis Questionnaire administered at the beginning and the end of the training period. Analysis of the data indicated that, upon completion of training, the T-Group participant sees his work as more human and less impersonal, sees clearer connection between how well interpersonal needs are met and how well the work gets done, sees himself clearly as the most significant part of his work problems, but sees no clear connection between his new perceptions and how he translates them into actions.

Stahl, G.R. "A Statistical Report of Industry's Experience With Role Playing." *Group Psychother.*, v. 6, 1954, pp. 202-215.

Presents a review of the statistics on industry's experience with role-playing, and some of the semantic constructs involved. (Moreno Institute, New York)